

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : W. Daniel Hillis, et al.  
Application No. : 10/734,647  
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Filed : December 11, 2003  
TITLE : RECEPTION OF SPATIAL-TO-TEMPORAL TRANSLATED DATA  
Examiner : Savla, Arpan P.  
Art Unit : 2185  
Docket No. : SE1-0002-US  
Customer No. : 80118

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 25213-1450

**APPELLANT'S BRIEF**

Dear Madam or Sir:

This paper is responsive to the Final Office Action mailed on March 30<sup>th</sup>, 2010.

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## **I. REAL PARTY IN INTEREST**

The real party in interest on this appeal is Searete, LLC by virtue of assignments of the inventors recorded at Reel 015357 and Frame 0361. Searete, LLC is wholly owned by Intellectual Ventures Management LLC.

## **II. RELATED APPEALS AND INTERFERENCES**

Appellant's legal representative and the real party in interest are aware of the following related applications in which appeals have been filed which may directly affect, or may be directly affected by, or may have a bearing on, the Board's decision in the present appeal: U.S. App. No. 10/734,659, and U.S. App. No. 10/734,658.

## **III. STATUS OF CLAIMS**

Claims 1-50 are pending. Claims 51-57 have been cancelled. (*Please see Appendix A*).

Claims 26-50 stand rejected under 35 USC §101 as directed towards non-statutory subject matter. *See Final Office Action*, p. 2 (March 30, 2010).

Claims 1-6, 12-31, and 37-50 stand rejected under 35 USC §103(a) as being unpatentable over Jaeger (US 6,345,028) in view of "IEEE 100: The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition" (hereinafter "IEEE") and Yao et al. (U.S. 5,938,734). *See Final Office Action*, p. 3 (March 30, 2010).

Claims 7-11 and 32-36 stand rejected under 35 USC §103(a) as being unpatentable over Jaeger in view of IEEE and Yao as applied above, and further in view of Ma et al. (US 5,926,649). *See Final Office Action*, p. 16 (March 30, 2010).

Appellant appeals the rejections of claims 1-50 under 35 U.S.C. §103(a).<sup>1</sup>

All pending claims are attached as Appendix A.

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<sup>1</sup> Appellant will eagerly and cooperatively work with the Examiner to resolve the Examiner's rejections under 35 U.S.C. §101, after the issues in this appeal have been resolved.

#### **IV. STATUS OF AMENDMENTS**

Amendments filed on December 14, 2009 have been entered. No proposed amendments have been refused entry by the Examiner.

#### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Examiner rejections of two sets of claims<sup>2</sup> are appealed herein: (i) Independent Claim 1 and its Dependent Claims 2-25; and (ii) Independent Claim 26 and its Dependent Claims 27-50.

##### **A. Summary of Independent Claim 1 and its Dependent Claims 2-25**

Support for these claims appears throughout Appellant's application, and also in those specific locations specified below.

In one instance, a method includes receiving a request for at least one specific content; obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content; and selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses, the spatial-to-temporal translated data being from a hardware spatial data storage system. *See*

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<sup>2</sup> Appellant respectfully points out that in accordance with 37 CFR §41.37(c)(1)(v), Appellant herein provides a "summary of claimed subject matter [having a] concise explanation of the subject matter defined in each of the independent claims involved in the appeal, which shall refer to the specification by page and line number, and to the drawing, if any, by reference characters. For each independent claim involved in the appeal and for each dependent claim argued separately under the provisions of paragraph (c)(1)(vii) of this section, every means plus function and step plus function as permitted by 35 U.S.C. §112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters." However, Appellant respectfully points out that the herein-provided summary is illustrative only and is NOT intended to be in any way limiting. Appellant is providing this summary under protest that the USPTO's regulations in this area exceed its statutory authority (*e.g.* are *ultra vires*).

*specification at, e.g., page 2, lines 8-13, p. 17, lines 13-15, Fig. 5 (Independent Claim 1).*

In another instance of the method, the receiving a request for data having at least one specific content includes, but is not limited to, receiving a request for at least a portion of recorded video. *See specification at, e.g., page 2, lines 15-17 (Dependent Claim 2).*

In one instance of the method, the receiving a request for data having at least one specific content includes, but is not limited to, receiving a request for at least a portion of recorded audio. *See specification at, e.g., page 2, lines 19-21 (Dependent Claim 3).*

In one instance of the method, the receiving a request for data having at least one specific content includes, but is not limited to, receiving a request for at least a portion of recorded audio and video. *See specification at, e.g., page 2, lines 23-25 (Dependent Claim 4).*

In one instance of the method, the receiving a request for data having at least one specific content includes, but is not limited to, receiving a request for at least a portion of at least one of computer processable and network processable data. *See specification at, e.g., page 3, lines 1-3 (Dependent Claim 5).*

In one instance of the method, the obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content includes, but is not limited to, consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions. *See specification at, e.g., page 3, line 5-8 (Dependent Claim 6).*

In one instance of the method, the consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system. *See specification at, e.g., page 24, lines 17-19 (Dependent Claim 7).*

In one instance of the method, the consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, consulting a schedule published by at least one of a source controller and a source switch controller. *See specification at, e.g., page 3, lines 14-17 (Dependent Claim 8).*

In one instance of the method, the consulting a schedule published by at least one of a source controller and a source switch controller includes, but is not limited to, accepting input of the schedule published by at least one of the source controller and the source switch controller. *See specification at, e.g., page 3, lines 19-22 (Dependent Claim 9).*

In one instance of the method, the consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, consulting a schedule received from at least one of a source controller and/or a source switch controller. *See specification at, e.g., page 3, lines 24-28 (Dependent Claim 10).*

In one instance of the method, the consulting a schedule received from at least one of a source controller and/or a source switch controller includes, but is not limited to, receiving the schedule from a data stream. *See specification at, e.g., page 4, lines 1-3 (Dependent Claim 11).*



In one instance of the method, the consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, associating the specific content with at least one absolute time associated with a clock. *See specification at, e.g., page 4, lines 5-7 (Dependent Claim 12).*

In one instance of the method, the associating the specific content with at least one absolute time associated with a clock includes, but is not limited to, associating the specific content with at least one absolute time associated with at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and a number of ticks relative to some specified received data. *See specification at, e.g., page 4, lines 9-13 (Dependent Claim 13).*

In one instance of the method, the associating the specific content with at least one absolute time associated with a clock includes, but is not limited to, associating the specific content with at least one absolute time associated with a transmitted clock. *See specification at, e.g., page 4, lines 15-17 (Dependent Claim 14).*

In one instance of the method, the associating the specific content with one or more times of one or more first network transmitted data portions includes, but is not limited to, associating the specific content with at least one relative time. *See specification at, e.g., page 4, lines 19-21 (Dependent Claim 15).*

In one instance of the method, the associating the specific content with at least one relative time includes, but is not limited to, associating the specific content with at least one time relative to a received marker. *See specification at, e.g., page 4, lines 23-25 (Dependent Claim 16).*

In one instance of the method, the associating the specific content with at least one relative time includes, but is not limited to, associating the specific content with at least one time of a first and/or a second received marker. *See specification at, e.g., page 4, lines 26-28 (Dependent Claim 17).*

In one instance of the method, the selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, selecting at least a portion of cyclically transmitted data in response to the one or more temporal addresses. *See specification at, e.g., page 5, lines 1-4 (Dependent Claim 18).*

In one instance of the method, the selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, selecting data from a first network and a second network in response to the one or more temporal addresses. *See specification at, e.g., page 5, line 6 -9 (Dependent Claim 19).*

In another instance, a method further includes constructing the specific content from data selected from a first network and a second network in response to the one or more temporal addresses. *See specification at, e.g., page 5, lines 10-14 (Dependent Claim 20).*

In one instance of the method, the selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, selecting data from at least one data stream having file-address -to-temporal- address translated data. *See specification at, e.g., page 5, lines 16-19 (Dependent Claim 21).*

In one instance of the method, the selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal

addresses includes, but is not limited to, selecting data from at least one data stream having disk-address -to-temporal- address translated data. *See specification at, e.g., page 5, lines 21-24 (Dependent Claim 22).*

In one instance of the method, the selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, selecting data from at least one data stream having tape-address -to-temporal- address translated data. *See specification at, e.g., page 5, lines 26-29 (Dependent Claim 23).*

In one instance of the method, the selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, selecting data from at least one data stream having substantially static memory-address -to-temporal- address translated data. *See specification at, e.g., page 6, lines 1-4 (Dependent Claim 24).*

In one instance of the method, the selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, selecting data from at least one data stream having object-address -to-temporal- address translated data. *See specification at, e.g., page 6, line 6-9 (Dependent Claim 25).*

#### **B. Summary of Independent Claim 26 and its Dependent Claims 27-50**

Support for these claims appears throughout Appellant's application, and also in those specific locations specified below.

In one instance, a system includes means receiving a request for at least one specific content; means for obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more

times of one or more transmitted data portions, in response to the request for the at least one specific content; and means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses, the spatial-to-temporal translated data being from a hardware spatial data storage system. *See specification at, e.g., page 2, lines 8-13, p. 17, lines 13-15, Fig. 5 (Independent Claim 26).*

In another instance of the system, the means for receiving a request for data having at least one specific content includes, but is not limited to, means for receiving a request for at least a portion of recorded video. *See specification at, e.g., page 2, lines 15-17 (Dependent Claim 27).*

In one instance of the system, the means for receiving a request for data having at least one specific content includes, but is not limited to, means for receiving a request for at least a portion of recorded audio. *See specification at, e.g., page 2, lines 19-21 (Dependent Claim 28).*

In one instance of the system, the means for receiving a request for data having at least one specific content includes, but is not limited to, means for receiving a request for at least a portion of recorded audio and video. *See specification at, e.g., page 2, lines 23-25 (Dependent Claim 29).*

In one instance of the system, the means for receiving a request for data having at least one specific content includes, but is not limited to, means for receiving a request for at least a portion of at least one of computer processable and network processable data. *See specification at, e.g., page 3, lines 1-3 (Dependent Claim 30).*

In one instance of the system, the means for obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to

the request for the at least one specific content includes, but is not limited to, means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions. *See specification at, e.g., page 3, line 5-8 (Dependent Claim 31).*

In one instance of the system, the means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, means for the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system. *See specification at, e.g., page 24, lines 17-19 (Dependent Claim 32).*

In one instance of the system, the means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, means for consulting a schedule published by at least one of a source controller and a source switch controller. *See specification at, e.g., page 3, lines 14-17 (Dependent Claim 33).*

In one instance of the system, the means for consulting a schedule published by at least one of a source controller and a source switch controller includes, but is not limited to, means for accepting input of the schedule published by at least one of the source controller and the source switch controller. *See specification at, e.g., page 3, lines 19-22 (Dependent Claim 34).*

In one instance of the system, the means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, means for consulting a schedule received from at least one of a source controller and/or a source switch controller. *See specification at, e.g., page 3, lines 24-28 (Dependent Claim 35).*

In one instance of the system, the means for consulting a schedule received from at least one of a source controller and/or a source switch controller includes, but is not limited to, means for receiving the schedule from a data stream. *See specification at, e.g., page 4, lines 1-3 (Dependent Claim 36).*

In one instance of the system, the means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions includes, but is not limited to, means for associating the specific content with at least one absolute time associated with a clock. *See specification at, e.g., page 4, lines 5-7 (Dependent Claim 37).*

In one instance of the system, the means for associating the specific content with at least one absolute time associated with a clock includes, but is not limited to, means for associating the specific content with at least one absolute time associated with at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and a number of ticks relative to some specified received data. *See specification at, e.g., page 4, lines 9-13 (Dependent Claim 38).*

In one instance of the system, the means for associating the specific content with at least one absolute time associated with a clock includes, but is not limited to, means for associating the specific content with at least one absolute time associated with a transmitted clock. *See specification at, e.g., page 4, lines 15-17 (Dependent Claim 39).*

In one instance of the system, the means for associating the specific content with one or more times of one or more first network transmitted data portions includes, but is not limited to, means for associating the specific content with at least one relative time. *See specification at, e.g., page 4, lines 19-21 (Dependent Claim 40).*

In one instance of the system, the means for associating the specific content with at least one relative time includes, but is not limited to, means for associating the specific content with at least one time relative to a received marker. *See specification at, e.g., page 4, lines 23-25 (Dependent Claim 41).*

In one instance of the system, the means for associating the specific content with at least one relative time includes, but is not limited to, means for associating the specific content with at least one time of a first and/or a second received marker. *See specification at, e.g., page 4, lines 26-28 (Dependent Claim 42).*

In one instance of the system, the means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, means for selecting at least a portion of cyclically transmitted data in response to the one or more temporal addresses. *See specification at, e.g., page 5, lines 1-4 (Dependent Claim 43).*

In one instance of the system, the means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, means for selecting data from a first network and a second network in response to the one or more temporal addresses. *See specification at, e.g., page 5, line 6-9 (Dependent Claim 44).*

In another instance, a method further includes means for constructing the specific content from data selected from a first network and a second network in response to the one or more temporal addresses. *See specification at, e.g., page 5, lines 10-14 (Dependent Claim 45).*

In one instance of the system, the means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, means for selecting data from at least

one data stream having file-address -to-temporal- address translated data. *See specification at, e.g., page 5, lines 16-19 (Dependent Claim 46).*

In one instance of the system, the means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, means for selecting data from at least one data stream having disk-address -to-temporal- address translated data. *See specification at, e.g., page 5, lines 21-24 (Dependent Claim 47).*

In one instance of the system, the means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, means for selecting data from at least one data stream having tape-address -to-temporal- address translated data. *See specification at, e.g., page 5, lines 26-29 (Dependent Claim 48).*

In one instance of the system, the means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, means for selecting data from at least one data stream having substantially static memory-address -to-temporal- address translated data. *See specification at, e.g., page 6, lines 1-4 (Dependent Claim 49).*

In one instance of the system, the means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses includes, but is not limited to, means for selecting data from at least one data stream having object-address -to-temporal- address translated data. *See specification at, e.g., page 6, line 6-9 (Dependent Claim 50).*



## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The issues in this response relate to whether the Examiner has met his burden of establishing a *prima facie* case sufficient to establish that Appellant's Claims 1-50 are unpatentable under 35 U.S.C. §103(a).

## **VII. ARGUMENT: ART OF RECORD DOES NOT ESTABLISH *PRIMA FACIE* CASE OF UNPATENTABILITY IN VIEW OF CITED ART OF RECORD**

Appellant respectfully asserts herein that, under the MPEP and legal standards for patentability as set forth below, the art of record does not establish a *prima facie* case of the unpatentability of Appellant's claims at issue. Specifically, Appellant respectfully shows below that the art of record does not recite the text of Appellant's claims at issue, and hence fails to establish a *prima facie* case of unpatentability. Accordingly, Appellant respectfully requests that the Examiner withdraw the rejections and hold all claims to be allowable over the art of record.

### **A. Legal Standards for Patentability<sup>3</sup>**

"The examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant. . . . If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In Re Glaug*, 283 F.3d 1335, 62 USPQ2d 1151 (Fed. Cir. 2002) ("During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability.... If the PTO fails to meet this burden, then the applicant is entitled to the patent.") (citations omitted); *MPEP* § 2107. Accordingly, unless and until an examiner establishes *prima facie* unpatentability, an applicant is entitled to a patent on all claims presented for examination.

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<sup>3</sup> Applicant is aware that Examiner is familiar with the MPEP standards. Applicant is merely setting forth the MPEP standards to serve as a framework for Applicant's arguments following and to ensure a complete written record is established. Should Examiner disagree with Applicant's characterization of the MPEP standards, Applicant respectfully request correction.

The definition of “**Prima Facie Case**” states that “[c]ourts use ‘*prima facie*’ to mean **not only that plaintiff’s evidence would reasonably allow conclusion plaintiff seeks, but also that plaintiff’s evidence compels such a conclusion if the defendant produces no evidence to rebut it.**” Black’s Law Dictionary, 6th Edition, 1189-90 (1990, West Publishing Co.). “*Prima Facie Evidence*” is defined as “[e]vidence **good and sufficient on its face**; such evidence as, in the judgment of the law, is **sufficient to establish** a given fact, or **the group or chain of facts constituting the party’s claim or defense, and which if not rebutted or contradicted, will remain sufficient. Evidence which, if unexplained or uncontradicted is sufficient to sustain a judgment in favor of the issue which it supports**, but which may be contradicted by other evidence.... Evidence which, standing alone and unexplained, would maintain the proposition and warrant the conclusion to support which it is introduced.” *Black’s Law Dictionary*, 6th Edition, 1190 (1990, West Publishing Co.). Consequently, when an examiner asserts that a claim is unpatentable (e.g., by way of anticipation, obviousness, written description, etc.), in view of some examiner-alleged “fact” or group or chain of “facts,” that examiner must present or adduce evidence that standing alone and unexplained would on its face establish the examiner-alleged “fact” or the group or chain of “facts.” In the absence of such facially sufficient evidence, no prima facie case of unpatentability obtains and the legal presumption of patentability requires that the claim issue over the cited art.

For example, the court in *Kotzab* held that “more than a mere scintilla of evidence is necessary” to support any factual allegations that an Examiner makes in support of his *prima facie* case presentation and that “[b]road conclusory statements standing alone are not ‘evidence’.” *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000). This underscores the requirement for *some* objective evidence supportive of each factual allegation asserted by the examiner in his *prima facie* case presentation; rejections based on *no* evidence have repeatedly been reversed by the Federal Circuit. See *In re McNeil-PPC*, 2008-1546, slip op. 1, 10 (Fed. Cir. July 31, 2009); *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000); and *In re Robert Skvorecz*, 2008-1221, slip op. 1, 7 (Fed. Cir. September 3, 2009).

Even more recently, *In Re Vaidyanathan* stated that “the Administrative Procedure Act requires the [PTO] to provide support for its [factual assertions]” so that the Federal Circuit can provide effective judicial review of the agency’s actions. *In Re Vaidyanathan*, No. 2009-1404, slip op. at 16 (C.A.F.C. May 19, 2010). *In Re Vaidyanathan* at p. xx proceeds to quote *In re Zurko* for further explanation:

**With respect to core factual findings [logically preceded by “factual allegations.”] in a determination of patentability, . . . the Board cannot simply reach conclusions [ e.g., “factual findings” based upon the logically preceding “factual allegations”] based on its own understanding or experience – or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings [ e.g., that would support the “factual allegations” on which the “factual findings” are allegedly based]. To hold otherwise would render the process of appellate review for substantial evidence on the record a meaningless exercise.**

*In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (emphasis added and words added to emphasize the rules in the context of a prima facie case showing).

If an applicant challenges an examiner’s allegation of *prima facie* unpatentability of any rejected claim, such as by demonstrating lack of evidence and/or reasoning sufficient to support the allegation of *prima facie* unpatentability, the examiner must either respond to the challenge(s) or allow the claim; otherwise the Board should reverse the examiner. *See Ex Parte Frye*, No. 2009-006-013, slip op. at 8, 9 (B.P.A.I. February 26, 2010) (signed by Director Kappos and Deputy Director Barner).

## **1. What a Reference “Teaches” Is a Question of Fact**

What a reference “teaches” is a question of fact. *Rapoport v. Dement*, 254 F.3d 1053, 1060 (Fed. Cir. 2001) (“What a reference teaches is a question of fact... Therefore, we review the Board’s characterization of the disclosure in the FPR Publication for substantial evidence.”) (emphasis added); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1323 (Fed. Cir. 2002) (“...what a reference teaches, is a question of fact.”) .

Conclusory statements that a reference “teaches” something beyond its bare recitations/direct disclosure do not constitute ANY evidence of such “teachings” unless they are supported by objective evidence of record. See *In re McNeil-PPC*, 2008-1546 (Fed. Cir. July 31, 2009) (anticipation rejection reversed where BPAI provided no evidence in support of its “findings” that the reference “taught” something beyond its direct disclosures: “**There is not substantial evidence, indeed, no evidence,** that Sasaki discloses ribs ‘compressed less than the fiber core’ or ‘a generally cylindrical compressed, solid fibre core.’ ... **Just as the Sasaki figures do not indicate the relative compression of the different portions of the tampon, the Sasaki figures completely lack any indication of the relative coarseness of different portions.**”) (emphasis added); *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002); *In re Kotzab*, 217 F.3d 1365, 1369-70 (Fed. Cir. 2000) (obviousness rejection reversed for failure of prima facie case on no evidence basis where **neither the examiner nor the Board cited evidence** supporting the Examiner’s “unstated premise” that the “one system” direct disclosures of the cited art equated to the “one sensor” term in applicant’s rejected claims: “**Evans clearly never uses the term ‘system’ as a substitute for the simple temperature measuring device it calls ‘sensor.’ And, the Board made no reference to any evidence in the record that would equate ‘one system’ with ‘one sensor.’**” ... “Broad conclusory statements standing alone are not ‘evidence.’” Board reversed on no evidence basis) (emphasis added); and *In re Robert Skvorecz*, 2008-1221, slip op. 1, 7 (Fed. Cir. September 3, 2009) (anticipation rejection reversed where Examiner’s assertion that reference contained identical recitations as the claim was unsupported by any evidence). Even if the PTO personnel were to seek to support their characterizations of alleged prior art with an expert witness affidavit, the law is that conclusory statements by an expert that a reference “teaches” something beyond its bare recitations/direct disclosure do not constitute ANY evidence of such “teachings” unless they are supported by objective documentary evidence. See *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1473 (Fed. Cir. 1997) (“The district court’s holding misapprehends the rigors of anticipation. For a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in the

prior art... **Although this disclosure requirement presupposes the knowledge of one skilled in the art of the claimed invention, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not there. An expert's conclusory testimony, unsupported by the documentary evidence, cannot supplant the requirement of anticipatory disclosure in the prior art reference itself.**") (emphasis added). Thus, when a party to a matter asserts that a reference "teaches" something beyond its bare recitations/direct disclosure, and that factual assertion is challenged by an opposite party, the law requires that the asserting party provide objective evidentiary support to "close the gap" between what the reference recites and what the asserting party *alleges* the reference teaches; in the absence of such evidence, there should be no finding of fact in favor of the asserted teaching. *See Rapoport v. Dement*, 254 F.3d 1053, 1060 (Fed. Cir. 2001); *See In re Bell*, 991 F.2d 781 (Fed. Cir. 1993) (reversing PTO and holding, when PTO presented no evidence to cure *prima facie* differences between patent claim and Examiner assertions regarding what the allegedly invalidating prior art "taught"); *See In re McNeil-PPC*, 2008-1546 (Fed. Cir. July 31, 2009); *See In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000); *See Ex Parte Frye*, No. 2009-006-013, slip op. at 14-15 (B.P.A.I. February 26, 2010) (signed by Director Kappos and Deputy Director Barner).

## **2. MPEP Standards for Determining Anticipation**

The examiner bears the initial burden of presenting a *prima facie* case of unpatentability, such as anticipation. *See Ex Parte Skinner*, 2 U.S.P.Q.2d 1788, 1788-89 (B.P.A.I. 1986); *In Re King*, 801 F.2d 1324, 231 U.S.P.Q. (BNA) 136 (Fed. Cir. 1986); *MPEP* § 2107 (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992) ("[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability....")). Failure of an examiner to meet this burden entitles an applicant to a patent. *Id.* ("[i]f examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent").

While the exact requirements of a *prima facie* case of anticipation have never yet been set forth overtly set forth by the Federal Circuit, such requirements may be readily synthesized from the statutes, the case law, and the MPEP. *See I. Donner*, Patent Prosecution: Law, Practice, and Procedure 1084-87 (5<sup>th</sup> ed. 2007). In order for an examiner to establish a *prima facie* case of anticipation of an applicant's claim, the examiner must first interpret the claim, consistent with the specification, and thereafter adduce evidence (e.g., cited prior art) that discloses the same elements, in the same arrangement, as the elements of the claim which the examiner asserts is anticipated. *See Ex Parte Frye* No. 2009-006-013, slip op. at 14 (B.P.A.I. February 26, 2010) (signed by Director Kappos and Deputy Director Barber)

#### **a) Interpreting a Claim at Issue**

It is the PTO's responsibility to interpret the claims during prosecution. *See In re Suitco Surface*, 2009-1418, Slip. Op. at 6-7 (Fed. Cir. April 14, 2010) (“During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.’ ...”) (internal citations).

During examination — as opposed to subsequent to issue — “[t]he [PTO] determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc); MPEP § 2111. The Federal Circuit has laid down a few bright line rules for this claim interpretation methodology. For example, in *In Re Suitco Surface*, the Federal Circuit “has instructed that any such construction be ‘consistent with the specification, . . . and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.’” *In Re Suitco Surface*, 2009-1418, Slip. Op. 8, April 14, 2010 (Fed. Cir.) (internal citations omitted) (emphasis in original). The court further emphasized the importance of construing claims with reference to the specification, stating that “[t]he broadest-construction rubric coupled with the term “comprising” does not give the PTO an unfettered license to interpret claims to embrace anything remotely related to the claimed invention. Rather,

claims should always be read in light of the specification and teachings in the underlying patent.”. *Suitco Surface* at p. 8 (emphasis added).

As another bright line rule, *In re Morris* shows that claim interpretation without consideration of the application disclosure is per se unreasonable:

As a preliminary matter the parties disagree about the proper claim construction methodology to be employed by the PTO. Appellants argue that this court's *in banc* decisions in *Markman v. Westview Instruments*, ..., and in *In re Donaldson*,... require the PTO in the course of prosecution to interpret claims in the same manner as courts are required to during infringement proceedings. The Solicitor responds by arguing that our past decisions permit the PTO to give claim language its “broadest reasonable interpretation” during prosecution, ...

The Solicitor is correct, and we reject appellants' invitation to construe either of the cases cited by appellants so as to overrule, *sub silentio*, decades old case law. Some cases state the standard as “the broadest reasonable interpretation,”..., others include the qualifier “consistent with the specification” or similar language,.... Since it would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant's written description, either phrasing connotes the same notion: as an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.

*In Re Morris* at 1053-54 (emphasis added). For example, In *Ex Parte Frye*, the Board looked to how a claim term was used in Frye's Specification to conclude that the Examiner had made an “unreasonably broad interpretation” of the claim term. *Ex Parte Frye*, No. 2009-006-013, slip op. at 14 (B.P.A.I. February 26, 2010) (signed by Director Kappos and Deputy Director Barner).

The Federal Circuit has recognized two very limited exceptions to the bright line rule that the PTO's broadest reasonable interpretation must take into account the guidance of the specification: (1) when the patent drafter has used case-law-defined terms in his claims, and (2) when the patent drafter has used known terms-of-art in his claims. When a patent drafter has used case-law-defined terms in his claims, the PTO can point to such case law definitions to provide a reasonable interpretation of such case-law-defined

terms. See *In Re Morris*, 127 F.3d 1048, 1055-56 (Fed. Cir. 1997) (“[Board’s claim interpretation was reasonable in that it was based on legitimate objective evidence of CCPA holdings where that] court had on several prior occasions interpreted the term “integral” to cover more than a unitary construction. ... Absent an express definition in their specification, the fact that appellants can point to definitions or usages that conform to their interpretation does not make the PTO’s definition unreasonable **when the PTO can point to other sources that support its interpretation.**”). When a patent drafter has used known terms-of-art in his claims, post-issuance claim interpretation law implies that the PTO can point to known-art definitions to provide a reasonable interpretation of such known art-defined terms. See, e.g., *Intellectual Prop. Dev., Inc. v. UA-Columbia Cablevision of Westchester, Inc.*, 336 F.3d 1308, 1315-1316 (Fed. Cir. 2003) (affirming holding that claim term “high frequency” was defined by the art despite patentee’s argument that he constructed the term as his own lexicographer).

Absent the two limited exceptions, as stated in *Morris* “it would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant’s written description.” For example, in an unpublished 1993 decision that the MPEP cites as instructive, the Federal Circuit held that interpretations that ignore the guidance of the specification are “improperly overbroad”:

**“The Commissioner argues that for examination purposes it is improper to read limitations from the specification into the claims..... Therefore, according to the Commissioner, the break-away means should be interpreted in the abstract, without reference to the specification.... The Commissioner’s reading of the claim limitation is improperly overbroad because it expands the meaning of the claim beyond that which was intended by the inventor as set forth in the specification ... When interpreting a claim term which is ambiguous [e.g., having more than one possible meaning or interpretation], such as ‘preselected level of force,’ we must look to the specification for the meaning ascribed to that term by the inventor”**

*In re Weiss*, 989 F.2d 1202 (Fed. Cir. 1993) (unpublished, but cited in MPEP § 2111.01 (II)). Federal Circuit precedent, as well as the MPEP itself, also indicates that “it would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant’s written description” when the patent drafter has introduced new terms –



which are neither case-law-defined terms nor known terms-of-art -- in the claims and remainder of the specification. As stated in the MPEP:

Courts have recognized that it is not only permissible, but often desirable, to use new terms that are frequently more precise in describing and defining the new invention. *In re Fisher*, 427 F.2d 833, 166 USPQ 18 (CCPA 1970). Although it is difficult to compare the claimed invention with the prior art when new terms are used that do not appear in the prior art, this does not make the new terms indefinite.

New terms are often used when a new technology is in its infancy or is rapidly evolving. The requirements for clarity and precision must be balanced with the limitations of the language and the science. If the claims, read in light of the specification, reasonably apprise those skilled in the art both of the utilization and scope of the invention, and if the language is as precise as the subject matter permits, the statute (35 U.S.C. 112, second paragraph) demands no more. *Shatterproof Glass Corp. v. Libbey Owens Ford Co.*, 758 F.2d 613, 225 USPQ 634 (Fed. Cir. 1985) (interpretation of "freely supporting" in method claims directed to treatment of a glass sheet); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986) (interpretation of a limitation specifying a numerical value for antibody affinity where the method of calculation was known in the art at the time of filing to be imprecise). This does not mean that the examiner must accept the best effort of applicant. If the proposed language is not considered as precise as the subject matter permits, the examiner should provide reasons to support the conclusion of indefiniteness and is encouraged to suggest alternatives that are free from objection.

*MPEP § 2173.05(a) II. The Requirement For Clarity And Precision Must Be Balanced With The Limitations Of The Language.*

As shown foregoing, the burden is on the PTO during patent prosecution to provide a claim interpretation that takes into account any interpretative guidance of the specification. An interpretation by the PTO that "ignore[s] any interpretive guidance afforded by the applicant's written description" "would be unreasonable" absent either of the two limited exceptions to the general rule.

**b) Anticipation is Based on Single Prior Art Reference that Meets All Disclosure Requirements**

With respect to showing that the cited prior art discloses the same elements, in the same arrangement, as the elements of the claim which the examiner asserts is anticipated, the MPEP states that “[a] claim is anticipated *only if each and every element as set forth in the claim is found*, either expressly or inherently described, in a single prior art reference. . . . The identical invention must be shown in as complete detail as is contained in the . . . claim. . . . The elements must be arranged as required by the claim . . . .” MPEP § 2131 (emphasis added) (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, (Fed. Cir. 1989), and *In re Bond*, 910 F.2d 831 (Fed. Cir. 1990)); *Ex Parte Frye*, No. 2009-006-013, slip op. at 11 (B.P.A.I. February 26, 2010) (signed by Director Kappos and Deputy Director Barner). For example, In *McNeil*, the Examiner had rejected claims reciting a tampon having “a generally cylindrical compressed, solid fibre core” and ribs “compressed less than the fiber core” in view of a Japanese patent application (“Sasaki”). McNeil appealed to the BPAI, which “specifically found that ‘Sasaki reasonably appears to depict a tampon having a generally cylindrical absorbent portion with a generally cylindrical compressed solid fiber core from which longitudinal ribs extend radially outward.’” See *id.*, 2008-1546, slip op. 1, 3 (Fed. Cir. July 31, 2009). In light of this and its finding that of each rib of Sasaki being “compressed less than the fiber core,” the Board affirmed the rejections. Insofar as the Sasaki reference did not directly disclose/recite as alleged by the Board, and since the Board did not supply evidence supporting its statement that “Sasaki reasonably appears to depict a tampon having a generally cylindrical absorbent portion with a generally cylindrical compressed solid fiber core from which longitudinal ribs extend radially outward,” the Federal Circuit reversed the rejection for lack of “substantial evidentiary support,” stating as follows:

There is not substantial evidence, indeed, no evidence, that Sasaki discloses ribs “compressed less than the fiber core” or “a generally cylindrical compressed, solid fibre core.” ... Just as the Sasaki figures do not indicate the relative compression of the different portions of the tampon, the Sasaki figures completely

lack any indication of the relative coarseness of different portions. ... Lastly, turning to the issue of spacing of the ribs, Figure 8 shows a space between the bottommost ribs, and there is arguably some space shown between other ribs. However, because it is neither clear that Sasaki discloses a core nor which portions of Sasaki's tampon the Board considered to be the ribs and which the Board considered to be the core, we cannot say that substantial evidence supports the Board's determination that Sasaki discloses ribs separated from each other "at the proximal end by an amount greater than" than at "the distal end."

*McNeil*, 2008-1546, slip op. 1, 10-11 (Fed. Cir. July 31, 2009) (emphasis added).

In *In re Skvorecz*, an anticipation rejection rested on an interpretation of features of a wire stand. The claim at issue required that each wire leg of the stand have a laterally displacing offset. The BPAI admitted that in the cited reference, "Buff," the offset in the rim was not shown to be 'for laterally displacing each wire leg relative to said upper rim' as required by claim 1, but nonetheless maintained the rejection. The Federal Circuit reversed for lack of evidence:

On rehearing the Board stated that Buff's wire 48 is a "transverse member" and not a wire leg, and therefore that it need not have a displacing offset. Mr. Skvorecz states, and we agree, that Buff's wire 48 is a leg of the Buff structure. The Board's contrary statement is unsupported by any evidence.

*Id.* at p. 8 (emphasis added).

Consequently, under the guidelines of the MPEP set forth above, if there is *any* substantial difference between the prior art cited by an examiner and an applicant's claim which the examiner asserts is rendered anticipated by the prior art, the prior art does NOT establish a *prima facie* case of anticipation and, barring other rejections, the applicant is entitled to a patent on such claim.

### **3. MPEP Standards for Determining Obviousness**

The examiner bears the initial burden of presenting a *prima facie* case of unpatentability, such as obviousness.<sup>4</sup> *MPEP* § 2142. While the exact requirements of

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<sup>4</sup> An invention, as embodied in the claims, is rendered obvious if an Examiner concludes that although the claimed invention is not identically disclosed or described in a reference, the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *MPEP* § 2141 (citing 35 U.S.C. § 103).

a prima facie case of obviousness have never yet been set forth overtly by the Federal Circuit, such requirements may be readily synthesized from the statutes, the case law, and the MPEP, *See I. Donner*, Patent Prosecution: Law, Practice, and Procedure 1084-87 (5<sup>th</sup> ed. 2007). The MPEP indicates that in order for an examiner to establish a *prima facie* case that an invention, as defined by a claim at issue, is obvious, the examiner must (1) interpret the claim at issue in view of the specification; (2) define one or more prior art reference components relevant to the claim at issue; (3) ascertain the differences between the one or more prior art reference components and the claim at issue; and (4) adduce objective evidence which establishes, under a preponderance of the evidence standard, a teaching to modify the teachings of the prior art reference components such that the prior art reference components can be used to construct a device substantially equivalent to the claim at issue. This last step generally encompasses two sub-steps: (1) adducement of objective evidence teaching how to modify the prior art components to achieve the individual elements of the claim at issue; and (2) adducement of objective evidence teaching how to combine the modified individual components such that the claim at issue, as a whole, is achieved. *See e.g., the law and/or discussions in MPEP § 2141 and MPEP § 2143*. Each of these foregoing elements is further defined within the law and/or discussions of the MPEP. *Id.*

The need for objectivity in the patent application process has been explained recently by the Supreme Court in *KSR v. Teleflex*, 550 U.S. 398; 127 S. Ct. 1727 (2007) which noted that such a rejection requires “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” As stated by the Court, obviousness can be established where “there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, *this analysis should be made explicit.*” (emphasis added). *KSR v. Teleflex*, 550 U.S. 398; 127 S. Ct. 1727 at 1741.

As further described by the Court “[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known

devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *KSR v. Teleflex*, 550 U.S. 398; 127 S. Ct. 1727 at 1741.

More recently, *Ex Parte Frye* has cited *In re Kahn* for the proposition that “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Ex Parte Frye*, No. 2009-006-013, slip op. at 12 (B.P.A.I. February 26, 2010) (signed by Director Kappos and Deputy Director Barner).

Even more recently, *In Re Vaidyanathan* provided explicit instructions as to how the PTO is to conduct themselves so as to provide objectivity in rejecting claims:

Obviousness is determined as a matter of foresight, not hindsight. *See id.* at 421 (citing *Graham*, 383 U.S. at 36). **KSR did not free the PTO’s examination process from explaining its reasoning. In making an obviousness rejection, the examiner should not rely on conclusory statements that a particular feature of the invention would have been obvious or was well known. Instead, the examiner should elaborate, discussing the evidence or reasoning that leads the examiner to such a conclusion.** Generally, the examiner cites prior art references to demonstrate the state of knowledge. *See* 37 C.F.R. §1.104(c)(2) (“In rejecting claims for want of novelty or obviousness, the examiner must cite the best references at his or her command.”); Manual of Patent Examining Procedure (MPEP) §706.02 (8th ed., rev. July 2008) (“Prior art rejections should ordinarily be confined strictly to the best available art. [citing exceptions] Such rejections should be backed up by the best other art rejections available.”). **If it is not possible for the examiner to provide this type of information, the examiner might choose instead to provide an affidavit detailing the examiner’s own personal knowledge (as a person approximating one of ordinary skill in the art) of the technology in question.** *See* 37 C.F.R. §1.104(d)(2) (“When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.”). **Where, as here, prior art**

references are cited to support an obviousness rejection, the references themselves need not in every case provide a “specific hint or suggestion” of the alteration needed to arrive at the claimed invention; the examiner’s analysis “may include recourse to logic, judgment, and common sense available to a person of ordinary skill that do not necessarily require explication in any reference or expert opinion.” *Perfect Web Techs. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009). In these cases the examiner should at least explain the logic or common sense that leads the examiner to believe the claim would have been obvious. Anything less than this results in a record that is insulated from meaningful appellate review. *Zurko*, 258 F.3d at 1386. If the examiner is able to render a claim obvious simply by saying it is so, neither the Board nor this court is capable of reviewing that determination. See *KSR*, 550 U.S. at 418, citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

*In Re Vaidyanathan*, No. 2009-1404, slip op. at pp. 16-18 (C.A.F.C. May 19, 2010).

#### a) Interpreting a Claim at Issue

It is the PTO’s responsibility to interpret the claims during prosecution. See *In re Suitco Surface*, 2009-1418, Slip. Op. at 6-7 (Fed. Cir. April 14, 2010) (“‘During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.’ ...”) (internal citations).

During examination — as opposed to subsequent to issue — “[t]he [PTO] determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc); MPEP § 2111. The Federal Circuit has laid down a few bright line rules for this claim interpretation methodology. For example, in *In Re Suitco Surface*, the Federal Circuit “has instructed that any such construction be ‘consistent with the specification, . . . and that claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.’” *In Re Suitco Surface*, 2009-1418, Slip. Op. 8, April 14, 2010 (Fed. Cir.) (internal citations omitted) (emphasis in original). The court further emphasized the importance of construing claims with reference to the specification, stating that “[t]he broadest-construction rubric coupled with the term “comprising” does not give the PTO an unfettered license to

interpret claims to embrace anything remotely related to the claimed invention. Rather, claims should always be read in light of the specification and teachings in the underlying patent.”. *Suitco Surface* at p. 8 (emphasis added).

As another bright line rule, *In re Morris* shows that claim interpretation without consideration of the application disclosure is per se unreasonable:

As a preliminary matter the parties disagree about the proper claim construction methodology to be employed by the PTO. Appellants argue that this court's *in banc* decisions in *Markman v. Westview Instruments*, ..., and in *In re Donaldson*,... require the PTO in the course of prosecution to interpret claims in the same manner as courts are required to during infringement proceedings. The Solicitor responds by arguing that our past decisions permit the PTO to give claim language its “broadest reasonable interpretation” during prosecution, ...

The Solicitor is correct, and we reject appellants’ invitation to construe either of the cases cited by appellants so as to overrule, *sub silentio*, decades old case law. Some cases state the standard as “the broadest reasonable interpretation,”..., others include the qualifier “consistent with the specification” or similar language,.... Since it would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant's written description, either phrasing connotes the same notion: as an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.

*In Re Morris* at 1053-54 (emphasis added). For example, In *Ex Parte Frye*, the Board looked to how a claim term was used in Frye’s Specification to conclude that the Examiner had made an “unreasonably broad interpretation” of the claim term. *Ex Parte Frye*, No. 2009-006-013, slip op. at 14 (B.P.A.I. February 26, 2010) (signed by Director Kappos and Deputy Director Barner).

The Federal Circuit has recognized two very limited exceptions to the bright line rule that the PTO’s broadest reasonable interpretation must take into account the guidance of the specification: (1) when the patent drafter has used case-law-defined terms in his claims, and (2) when the patent drafter has used known terms-of-art in his claims. When a patent drafter has used case-law-defined terms in his claims, the PTO can point to such

case law definitions to provide a reasonable interpretation of such case-law-defined terms. *See In Re Morris*, 127 F.3d 1048, 1055-56 (Fed. Cir. 1997) (“[Board’s claim interpretation was reasonable in that it was based on legitimate objective evidence of CCPA holdings where that] court had on several prior occasions interpreted the term “integral” to cover more than a unitary construction. ... Absent an express definition in their specification, the fact that appellants can point to definitions or usages that conform to their interpretation does not make the PTO’s definition unreasonable when the PTO can point to other sources that support its interpretation.”). When a patent drafter has used known terms-of-art in his claims, post-issuance claim interpretation law implies that the PTO can point to known-art definitions to provide a reasonable interpretation of such known art-defined terms. *See, e.g., Intellectual Prop. Dev., Inc. v. UA-Columbia Cablevision of Westchester, Inc.*, 336 F.3d 1308, 1315-1316 (Fed. Cir. 2003) (affirming holding that claim term “high frequency” was defined by the art despite patentee’s argument that he constructed the term as his own lexicographer).

Absent the two limited exceptions, as stated in *Morris* “it would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant’s written description.” For example, in an unpublished 1993 decision that the MPEP cites as instructive, the Federal Circuit held that interpretations that ignore the guidance of the specification are “improperly overbroad”:

**“The Commissioner argues that for examination purposes it is improper to read limitations from the specification into the claims..... Therefore, according to the Commissioner, the break-away means should be interpreted in the abstract, without reference to the specification.... The Commissioner’s reading of the claim limitation is improperly overbroad because it expands the meaning of the claim beyond that which was intended by the inventor as set forth in the specification ... When interpreting a claim term which is ambiguous [e.g., having more than one possible meaning or interpretation], such as ‘preselected level of force,’ we must look to the specification for the meaning ascribed to that term by the inventor”**

*In re Weiss*, 989 F.2d 1202 (Fed. Cir. 1993) (unpublished, but cited in MPEP § 2111.01 (II)). Federal Circuit precedent, as well as the MPEP itself, also indicates that “it would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant’s written description” when the patent drafter has introduced new terms – which



are neither case-law-defined terms nor known terms-of-art -- in the claims and remainder of the specification. As stated in the MPEP:

Courts have recognized that it is not only permissible, but often desirable, to use new terms that are frequently more precise in describing and defining the new invention. *In re Fisher*, 427 F.2d 833, 166 USPQ 18 (CCPA 1970). Although it is difficult to compare the claimed invention with the prior art when new terms are used that do not appear in the prior art, this does not make the new terms indefinite.

New terms are often used when a new technology is in its infancy or is rapidly evolving. The requirements for clarity and precision must be balanced with the limitations of the language and the science. If the claims, read in light of the specification, reasonably apprise those skilled in the art both of the utilization and scope of the invention, and if the language is as precise as the subject matter permits, the statute (35 U.S.C. 112, second paragraph) demands no more. *Shatterproof Glass Corp. v. Libbey Owens Ford Co.*, 758 F.2d 613, 225 USPQ 634 (Fed. Cir. 1985) (interpretation of "freely supporting" in method claims directed to treatment of a glass sheet); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986) (interpretation of a limitation specifying a numerical value for antibody affinity where the method of calculation was known in the art at the time of filing to be imprecise). This does not mean that the examiner must accept the best effort of applicant. If the proposed language is not considered as precise as the subject matter permits, the examiner should provide reasons to support the conclusion of indefiniteness and is encouraged to suggest alternatives that are free from objection.

*MPEP § 2173.05(a) II. The Requirement For Clarity And Precision Must Be Balanced With The Limitations Of The Language.*

As shown foregoing, the burden is on the PTO during patent prosecution to provide a claim interpretation that takes into account any interpretative guidance of the specification. An interpretation by the PTO that "ignore[s] any interpretive guidance afforded by the applicant's written description" "would be unreasonable" absent either of the two limited exceptions to the general rule.

**b) Definition of One or More Prior Art Reference Components Relevant to the Claim at Issue**

Once the claim at issue has been properly interpreted, the next step is the definition of one or more prior art reference components (*e.g.*, electrical, mechanical, or other components set forth in a prior art reference) relevant to the properly interpreted claim at issue. With respect to the definition of one or more prior art reference components relevant to the claim at issue, the MPEP cites law that defines three proper sources of such prior art reference components, with the further requirement that each such source must have been extant at the time of invention to be considered relevant. These three sources are as follows: patents as defined by 35 U.S.C. § 102, printed publications as defined by 35 U.S.C. § 102, and information (*e.g.*, scientific principles) deemed to be "well known in the art"<sup>5</sup> as defined under 35 U.S.C. § 102. *MPEP* § 2141; *MPEP* § 2144.

**c) Ascertainment of Differences between Prior Art Reference Components and Claim at Issue; Teaching to Modify and/or Combine Prior Art Reference Components to Remedy Those Differences in Order to Achieve Recitations of Claim at Issue**

With one or more prior art components so defined and drawn from the proper prior art sources, the differences between the one or more prior art reference components and the elements of the claim at issue are to be ascertained. Thereafter, in order to establish a case of *prima facie* obviousness, an examiner must set forth a rationale, supported by objective evidence<sup>6</sup> sufficient to demonstrate under a preponderance of the evidence standard,<sup>7</sup> that

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<sup>5</sup> The fact that information deemed to be "well known in the art" can serve as a proper source of prior art reference components seems to open the door to subjectivity, but such is not the case. As a remedy to this potential problem, *MPEP* § 2144.03 states that if an Examiner asserts that his position is derived from and/or is supported by a teaching or suggestion that is alleged to have been "well known in the art," and that if an applicant traverses such an assertion (that something was "well known within the art"), the Examiner must cite a reference in support of his or her position. The same MPEP section also states that when a rejection is based on facts within the personal knowledge of an Examiner, the data should be stated as specifically as possible, and the facts must be supported, when called for by the applicant, by an affidavit from the Examiner. Such an affidavit is subject to contradiction or explanation by the affidavits of the applicant and other persons. *Id.* Thus, all sources of prior art reference components must be objectively verifiable.

<sup>6</sup> The proper sources of the objective evidence supporting the rationale are the defined proper sources of prior art reference components, discussed above, with the addition of factually similar legal precedent. *MPEP* § 2144.

in the prior art extant at the time of invention there was a teaching to modify and/or combine the one or more prior art reference components to construct a device that meets the recitations of the claim at issue.

In *Kotzab*, insofar as the cited Evans reference did not directly disclose/recite as alleged by the Board, and since the Board did not supply evidence supporting its contention that “one system” is equal to “one sensor,” the Federal Circuit reversed the rejection for lack of “necessary substantial evidence to support a rejection,” stating as follows:

The Examiner cites Evans for teaching that “one system constructed and operated according to the invention may be used to control a number of valves.” Evans application, p. 19, ll. 6-8 (emphasis added). In view of this disclosure only, the Examiner concluded that Evans teaches the use of one sensor to control a number of valves. This conclusion must necessarily rest on the unstated premise by the Examiner that “one system” is equal to “one sensor.”

But the Board's decision, adopting the Examiner's premise, lacks the necessary substantial evidence to support a rejection of Kotzab's claims. Specifically, there is not substantial evidence to show that “one system” is the same thing as “one sensor.” The words “sensor” and “probe” are used throughout Evans to refer to the device that measures the mold temperature. ... Evans clearly never uses the term “system” as a substitute for the simple temperature measuring device it calls “sensor.” And, the Board made no reference to any evidence in the record that would equate “one system” with “one sensor.”

As mentioned previously, more than a mere scintilla of evidence is necessary to support the Board's implicit conclusion that “one system” is equal to “one sensor.” Based on the entirety of Evans' disclosure, we cannot say that there is such relevant evidence as a reasonable mind might accept as adequate to support the conclusion that “one system” means “one sensor.”

*See id.*, 217 F.3d 1365, 1370-71 (Fed. Cir. 2000) (emphasis added; Board reversed for failure of the prima facie case on account of “no evidence”).

In *Vaidyanathan*, with respect to Vaidyanathan's Claim 1, the patent examiner alleged that the cited prior art reference of Biggers “taught,” and thus rendered unpatentable, the significantly prima facie different language of step c of the rejected

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<sup>7</sup> In the context of a prima facie case showing a preponderance of the evidence standard would be met only by evidence which, standing alone and unexplained, would compel a conclusion of unpatentability if the applicant produces no evidence to rebut it. In the absence of such the standard is not met.

patent Claim 1. Before the BPAI, Vaidyanathan demonstrated that the direct disclosures of the Biggers reference did not “teach” the language of step c of rejected patent Claim 1 as alleged by the examiner, and that the examiner had not adduced any evidence or reasoning based on evidence that would close the gap between the direct disclosures of the Biggers reference and the plain language of the rejected Claim 1. *In Re Vaidyanathan*, 2009-1404, \*12-13, (Fed. Cir. May 19, 2010). Accordingly, Vaidyanathan argued that the examiner had not established a prima facie case of unpatentability and that Claim 1 should issue in view of statutory law and CAFC precedent. In response, before the BPAI the patent examiner baldly stated that Biggers did “teach” step c, and in response to Vaidyanathan’s demonstrations cited no evidence or reasoning, instead effectively resorting to fiat to support his factual allegations as to Biggers’ “teachings”; that is, the examiner effectively responded that Biggers “teaches” the *prima facie* different step c “because I say so.” *In Re Vaidyanathan*, 2009-1404, \*12-13, (Fed. Cir. May 19, 2010).

Rather than reversing the examiner and sending the application back down for either issuance or rework by the examiner, in response to Vaidyanathan’s demonstration that the patent examiner’s “because I say so” based rejection was fatally defective, the BPAI substituted its own “because we say so” based rejection. Specifically, the BPAI pointed to different parts of the Biggers reference in support of rejecting Claim 1, but admitted that the Biggers reference was silent as to some of the key language that Vaidyanathan had demonstrated was not shown in the art. *In Re Vaidyanathan*, 2009-1404, \*7-8, (Fed. Cir. May 19, 2010). The BPAI purported to cure this gap by baldly stating that “a person of ordinary skill in the art” would “understand” the Biggers reference to “teach” the missing claim language on which the Biggers reference just happened to be silent. *In Re Vaidyanathan*, 2009-1404, \*8, (Fed. Cir. May 19, 2010). In analyzing this gambit, the Court pointed out, “the Board cited no other evidence indicating the level of ordinary skill in the relevant art, or explaining why a person of ordinary skill would view” the Biggers reference as having an “implicit teaching” of the claim language, when Biggers itself was silent on this point. *In Re Vaidyanathan*, 2009-

1404, \*8, (Fed. Cir. May 19, 2010). So, like the examiner, the BPAI was supporting its factual allegations not with evidence, but with fiat.

The court analyzed this gambit of the BPAI substituting its own fiat-based rejection for the fiat-based rejection of the examiner and found it constituted reversible legal error. *In Re Vaidyanathan*, 2009-1404, \*12-13, (Fed. Cir. May 19, 2010).

The preferable evidence relied upon is an express teaching to modify/combine within the properly defined objectively verifiable sources of prior art. In the absence of such express teaching, an examiner may attempt to establish a rationale to support a finding of such teaching reasoned from, or based upon, express teachings taken from the defined proper sources of such evidence (*i.e.*, properly defined objectively verifiable sources of prior art). *MPEP* § 2144; *In re Dembiczak*, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999). Such reasoning MUST be made explicit, otherwise there is no way that the Federal Circuit can provide appropriate appellate review. *In Re Vaidyanathan*, 2009-1404, \*17-18, (Fed. Cir. May 19, 2010) ("If the examiner is able to render a claim obvious simply by saying it is so, neither the Board nor this court is capable of reviewing that determination.") (citing *KSR v. Teleflex*, 550 U.S. 398, 418 (2008)).

The MPEP recognizes the pitfalls associated with the tendency to subconsciously use impermissible "hindsight" when an examiner attempts to establish such a rationale. In order to avoid this pitfall, the MPEP has set forth at least two rules to ensure against the likelihood of such impermissible use of hindsight. The first rule of the MPEP is that:

under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information,<sup>8</sup> the examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. Knowledge of an Applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search, and evaluate the "subject matter as a whole" of the invention. The tendency to resort to "hindsight" based upon an Applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

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<sup>8</sup> "Factual information" is information actually existing or occurring, as distinguished from mere supposition or opinion. *Black's Law Dictionary* 532 (5th ed. 1979).

*MPEP* § 2142. The *MPEP* gives explicit guidance as to how an applicant may argue that an Examiner's conclusion of obviousness is based on improper hindsight reasoning as follows. "Any judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *MPEP* § 2145(X)(A) (emphasis added). Thus, if the only objective evidence of such teaching to modify and/or combine prior art reference components is an applicant's disclosure, it stands to reason that no evidence of such teaching exists.

The second rule that the *MPEP* gives to allow applicants to help ensure that examiners have not resorted to impermissible hindsight is that if an examiner attempts to rely on some advantage or expected beneficial result that would have been produced by a modification and/or combination of the prior art reference components as evidence to support a rationale to establish such teachings to modify and/or combine prior art reference components, the *MPEP* – when called for by applicant -- requires that the examiner prove that such advantage or expected beneficial result appear as objectively verifiable teachings present in the acceptable sources of prior art (or drawn from a convincing line of reasoning based on objectively verifiable established scientific principles or teachings). *MPEP* § 2144. Thus, as a guide to avoid the use of impermissible hindsight, these rules from the *MPEP* make clear that absent some objective evidence, sufficient to persuade under a preponderance of the evidence standard, no teaching of such modification and/or combination exists. *See In Re Sang Su Lee* 277 F.3d 1338 (Fed. Cir. 2002) ("‘the central question is whether there is reason to combine [the] references,’ a question of fact drawing on the *Graham* factors.... ‘The factual inquiry whether to combine references must be thorough and searching. .... It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with.’").

On the other hand, in general, any production of evidence by Applicant is not an implicit or explicit admission that the USPTO has established a *prima facie* case of

unpatentability of any of Applicant's claims, nor is such evidence intended to rebut establishment of a *prima facie* case of unpatentability. Applicant expressly asserts, in light of any proffered evidence and despite any unpersuasiveness or irrelevance of the same, that the USPTO must still adduce evidence sufficient to meet its burden of establishing a *prima facie* case of unpatentability.

#### **4. Affidavit Evidence**

As set forth above, the law states as follows: “the examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant. . . . If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent.” *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In Re Glaug*, 283 F.3d 1335, 62 USPQ2d 1151 (Fed. Cir. 2002) (“During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. ... If the USPTO fails to meet this burden, then the applicant is entitled to the patent.”) (citations omitted); *MPEP* § 2107. This initial burden is a cornerstone of examination principles and, as such, the Board ensures on appeal that a *prima facie* case for the unpatentability of Applicant's claims has been established *without any deference to the USPTO*. *Ex Parte Frye*, Appeal 2009-006013, pp. 9-10 (BPAI 2010) (“an applicant can overcome a rejection by showing insufficient evidence of *prima facie* [unpatentability] ... the Board reviews the particular finding(s) contested by an appellant *anew*.”) (emphasis added). Accordingly, unless and until the USPTO presents evidence establishing *prima facie* unpatentability, an applicant is entitled to a patent on all claims presented for examination.

In attempting to establish a *prima facie* case of unpatentability, the USPTO must consider any evidence produced by Applicant. 37 CFR 1.132; *United States v. Adams*, 383 U.S. 39, 148 USPQ 479 (1966) (Great reliance must be placed on this type of evidence). Importantly, the production of such evidence by Applicant is not an admission that the USPTO has established a *prima facie* case of unpatentability, nor is it a rebuttal to

any establishment of a *prima facie* case. Rather, the USPTO retains the burden of establishing a *prima facie* case in light of and while considering any evidence produced by Applicant. MPEP 716.01(a) ("Affidavits or declarations, when timely presented, containing evidence of criticality or unexpected results, commercial success, long-felt but unsolved needs, failure of others, skepticism of experts, etc., *must be considered by the examiner in determining the issue of [unpatentability, e.g.,] obviousness of claims for patentability under 35 U.S.C. [e.g.,] 103.*") (emphasis added); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983) ("evidence rising out of the so-called 'secondary considerations' must always when present be considered en route to a determination of obviousness."); *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966); *In re Palmer*, 451 F.2d 1100, 172 USPQ 126 (CCPA 1971); *In re Fielder*, 471 F.2d 640, 176 USPQ 300 (CCPA 1973); *In re Margolis*, 785 F.2d 1029, 228 USPQ 940 (Fed. Cir. 1986). Moreover, lack of objective evidence or any finding that the evidence produced by Applicant is unconvincing or irrelevant does not weigh in favor of unpatentability (e.g., obviousness). See *Miles Labs. Inc. v. Shandon Inc.*, 997 F.2d 870, 878, 27 USPQ2d 1123, 1129 (Fed. Cir. 1993), *cert. denied*, 127 L. Ed. 232 (1994) (The lack of objective evidence supporting patentability does not weigh in favor of unpatentability).

Accordingly, in addition to the arguments herein, Applicant may respectfully produce objective evidence by way of declaration submitted contemporaneously herewith for consideration by the USPTO. Irrespective of any such evidence that may be submitted -- see attachments, if any -- the USPTO still bears the burden of establishing a *prima facie* case for the unpatentability of any rejected claim(s).

Furthermore, in light of legal authority cited above, any production of evidence by Applicant is not an implicit or explicit admission that the USPTO has established a *prima facie* case of unpatentability of any rejected claim(s). Irrespective of any proffered evidence and despite any unpersuasiveness or irrelevance of the same, the USPTO retains a burden of establishing a *prima facie* case of unpatentability of any rejected claim(s).

If, after evaluating such evidence, the USPTO continues to assert the unpatentability of a rejected claim, the MPEP requires that in the next Office Action the



USPTO render a statement to that effect along with (1) specifying the reasons for which the supplied objective evidence is deemed unpersuasive and (2) independently establishing a *prima facie* case for the unpatentability of each rejected claim without any consideration of or influence by any such supplied objective evidence.<sup>9</sup> MPEP 716.01(d) (“If, after evaluating the evidence, the examiner still asserts that the claimed invention is unpatentable, the next Office action should include a statement to that effect and identify the reason(s).”); *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 7 USPQ2d 1222 (Fed. Cir.), *cert. denied*, 488 U.S. 956 (1988).

**B. Technical Material Cited by Examiner (Jaeger (US 6,345,028)) Does Not Show or Suggest the Text of Independent Claim 1 and Dependent Claims 2-26 as Presented Herein; Notice of Allowance of Same Respectfully Requested**

**1. Independent Claim 1**

Independent Claim 1 recites:

1. A method comprising:
  - receiving a request for at least one specific content;
  - obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content; and
  - selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses, the spatial-to-temporal translated data being from a hardware spatial data storage system.(Emphasis added.)

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<sup>9</sup> The USPTO is respectfully reminded that unpersuasive objective evidence does not weigh in favor of a finding of obviousness. See *Miles Labs. Inc. v. Shandon Inc.*, 997 F.2d 870, 878, 27 USPQ2d 1123, 1129 (Fed. Cir. 1993), *cert. denied*, 127 L. Ed. 232 (1994) (The lack of objective evidence of nonobviousness does not weigh in favor of obviousness).

As shown following, (1) Examiner is interpreting Jaeger to “teach” at least a portion of the text of Independent Claim 1 but has not provided any objectively verifiable evidence supporting his interpretation, and (2) modifications/ combinations of technologies cited by Examiner to meet the recitations of Independent Claim 1 are mere conclusory statements, would change the principle of operation, and/or render the prior art components unfit for their intended purpose.

Under the MPEP standards as set forth herein, Examiner has not met his burden to establish a prima facie case of the unpatentability of Independent Claim 1 for any or all of the forgoing reasons. Accordingly, Applicant respectfully requests that Examiner withdraw his rejections of Claim 1 and Issue a Notice of Allowability for same..

- a) **Examiner is Characterizing Jaeger and/or IEEE to “Teach” the Text of Independent Claim 1, But Does Not Support His Characterization, Therefore The Examiner Has Not Met His Burden to Establish a *Prima Facie* Case of Unpatentability for Independent Claim 1**

As set forth above, Independent Claim 1 recites as follows:

1. A method comprising:

[a] receiving a request for at least one specific content;

[b] obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content; and

[c] selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses, the spatial-to-temporal translated data being from a hardware spatial data storage system.<sup>10</sup>  
(Emphases added.)

Concerning this, the Examiner has stated:

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<sup>10</sup> The lettering of the clauses herein is merely for sake of clarity of argument and should not be taken to imply any particular ordering of the clauses.

6. Claims 1-6, 12-20-31, and 37-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaeger (U.S. Patent 6,345,028) in view of "IEEE 100: The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition" (hereinafter "IEEE") and Yao et al. (U.S. Patent 5,938,734) (hereinafter "Yao").

7. As per claim 1, Jaeger discloses a method comprising:

obtaining one or more temporal addresses corresponding to the at least one specific content (col. 5, lines 49-63; Fig. 1); *it should be noted that the "time stamps" are equivalent to the "temporal addresses."*

and selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses, the spatial-to-temporal translated data being from a hardware spatial data storage system (col. 6, lines 49-63, Fig. 2). *It should be noted that the re-ordered audio/video/data tracks/signals being streamed from the RAM buffer are equivalent to the "spatial-to-temporal translated data."*

Jaeger does not explicitly disclose receiving a request for at least one specific content.

IEEE discloses disk read I/O transactions are composed of transaction initiations (i.e. requests) (pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the record/playback apparatus receive a playback request so that the incremental temporal segments of each recorded track are read from the disk in response to the playback request. The motivation for doing so would have been to prevent playback at times when the disk drive and/or RAM buffer are not ready to handle the reading and/or writing of data frames.

The combination of Jaeger/IEEE does not disclose associating the specific content with one or more times of one or more transmitted data portions.

Yao discloses associating the specific content with one or more times of one or more transmitted data portions (col. 7, lines 33-65; Fig. 5, element S26, Fig. 6). *It should be noted that the "transfer start timings" are equivalent to the "one or more times"*

The combination of Jaeger/IEEE and Yao are analogous art because they are from the same field of endeavor, that being data streaming systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Yao's schedule within Jaeger/IEEE's recording/playback system. The motivation for doing so would have been to provide a real time stream server and a method for operating a real time stream server, capable of realizing a supply of a plurality of real time stream data with different data rates by a scheduling scheme using constant time-slot interval and transfer start timing period, without wasting a transfer capacity of disk devices (Yao, col. 2, lines 40-46).

See Examiner's *Final Office Action*, p. 3-4 (March 30<sup>th</sup>, 2010).

Applicant respectfully disagrees and traverses the rejection.

**(1) Examiner Has Put Forth No Evidence Supporting His Characterization That the Cited References “Teach” Recitations of Clause [b] of Independent Claim 1.**

Applicant respectfully points out that Applicant has reviewed the portions of the Cited References (Jaeger, IEEE, Yao) identified by the Examiner, and so far as Applicant can discern, the Cited References do not recite “obtaining one or more temporal addresses corresponding to the at least one specific content *by associating the specific content with one or more times of one or more transmitted data portions*, in response to the request for the at least one specific content” as recited in clause [b] of Independent Claim 1. Rather, the portions of Jaeger cited by Examiner with respect to Claim 1 recite as follows:

onto a disk drive. First, incremental temporal segments of each recorded audio track are read from the disk 11 in a predetermined numerical order, e.g., starting with track 1 and ending with the last recorded track (e.g., track N). The temporal segments are all of the same short duration, such as 100 ms, although other durations may be used. In the example of FIG. 1, the first 100 ms segments of tracks 1–N are read in a predetermined order from the disk 11 and placed in a RAM buffer in the predetermined order, where they are assembled into composite data frame 1. Frame 1 is labeled with a time stamp which indicates the starting point of the frame and also the number of the frame. Likewise, the second 100 ms segments of tracks 1–N are then read from the disk drive 11 and placed in the RAM buffer as data frame 2, which is also labeled with its respective time stamp. This

\* \* \*

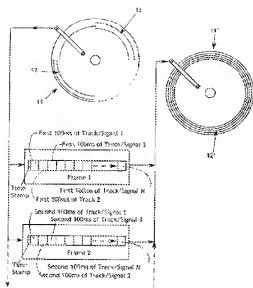


FIG. 1

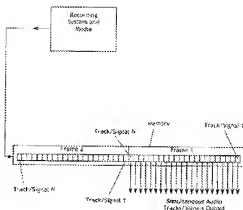


FIG. 2

See Jaeger (5:49-63; Figs. 1-2).

As can be seen from the foregoing, the Examiner-identified portions of Jaeger do not recite or suggest the text of at least clause [b] as recited in Independent Claim 1: “obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content.” (Emphasis added.) Instead, Jaeger recites “First, incremental temporal segments of each recorded audio track are read from the disk 11 in a predetermined numerical order, e.g., starting with track 1 and ending with the last recorded track (e.g., track N). The temporal segments are all of the same short duration, such as 100 ms, although other durations may be used.” (Jaeger 5:49-54.) Consequently, on its face, Jaeger does not show the text of at least Clause [b] of Independent Claim 1.

Similarly, the Examiner-cited portions of IEEE state:

**I/O transaction** An instance of activity between Functions, usually composed of an Initiation and a Completion, although not necessarily bound one to one. A disk read and network data delivery are examples of I/O transactions.

(C/M/M) 1212.1-1993

**transaction initiation (request)** A request generated by the initiator to start an action by the responder. An initiation message usually transfers a command and sometimes data. For a disk read I/O transaction, for example, the initiation transfers the address and command.

(C/M/M) 1212.1-1993

See IEEE (p. 590, 1198).

As can be seen from the foregoing, the Examiner-identified portions of IEEE do not recite or suggest the text of at least clause [b] as recited in Independent Claim 1: “obtaining one or more temporal addresses corresponding to the at least one specific content by *associating the specific content with one or more times of one or more transmitted data portions*, in response to the request for the at least one specific content.” (Emphasis added.) Instead, IEEE recites “An initiation message usually transfers a command and sometimes data.” (IEEE, p. 1198.) Consequently, on its face, IEEE does not show or suggest the text of at least Clause [b] of Independent Claim 1.

Finally, the Examiner-cited portions of Yao state:

Next, the scheduling unit 22 carries out the scheduling including a selection of transfer start timings for the unit streams S0 to Sm-1 to be used (step S25). Here, by the real time stream data storing procedure described above, m pieces of blocks b(m·k+j) (j=0, . . . , m-1) which are continuous in the original real time stream data are sequentially distributed among the unit streams S0 to Sm-1. Consequently, in order to carry out the transfer of these blocks continuously, the transfer start timings of the unit streams S0 to Sm-1 are displaced one another by the block transfer time T/m part.

Here however it is necessary for each one of the unit streams S0 to Sm-1 to select a time-slot for carrying out the disk access, so that it becomes possible to read out the respective top block from the disk device 31 which stores that top block, before the selected transfer start timing, without affecting the continuity of the other already connected unit streams. Note that the ID number of the disk

device 31 which stores the top block of each unit stream can be obtained from the directory information obtained at the step S22. This time-slot selection operation will be described in detail below. When this condition is not satisfied, it is necessary to select different transfer start timings anew.

Each one of the unit streams S0 to Sm-1 so connected is then scheduled as an independent unit stream for which the block transfer time for one block is T/m, that is, scheduled according to the block transfer period T, the block size L, the time-slot interval L, and the block transfer time T/m. Then, according to this scheduling, each block is read out from the buffer memory 4 from the recording position of each block on a disk device which is indicated by the directory information, and supplied to the client 7 from the data transfer unit 5 (step S26).

\* \* \*

FIG.5

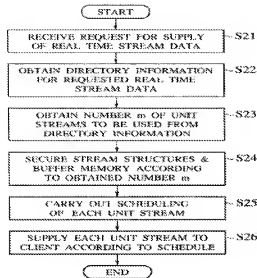


FIG.6



See Yao (7:33-65, Figs. 5-6).

As can be seen from the foregoing, the Examiner-identified portions of Yao do not recite or suggest the text of at least clause [b] as recited in Independent Claim 1: “obtaining one or more temporal addresses corresponding to the at least one specific content by *associating the specific content with one or more times of one or more transmitted data portions*, in response to the request for the at least one specific content.” (Emphasis added.) Instead, Yao recites “Supply each unit stream to client according to schedule.” (Yao, element S26.) Consequently, on its face, Yao does not show or suggest the text of at least Clause [b] of Independent Claim 1.

For the foregoing reasons, the Cited References (Jaeger, IEEE, and Yao), either singly or in combination, do not disclose or suggest the recitations of clause [b] of Claim 1: “obtaining one or more temporal addresses corresponding to the at least one specific content by *associating the specific content with one or more times of*

one or more transmitted data portions, in response to the request for the at least one specific content.” (Emphasis added.) Therefore, Claim 1 is in condition for allowance.

Applicant respectfully notes: “[W]hat a reference teaches is a question of fact.” *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1358 (Fed. Cir. 2001) (referencing *In re Beattie*, 974 F.2d 1309, 1311 (Fed.Cir.1992)). See also *McGinley v. Franklin Sports*, 262 F.3d 1339, 1350 (Fed. Cir. 2001).

Applicant has shown by direct quotations that Independent Claim 1 and the Cited References (Jaeger, IEEE, and Yao) are very different on their faces. See *supra* at pp. 41 (quotation of Claim 1); at pp. 44-**Error! Bookmark not defined.** (quotation of Jaeger). Insofar that Applicant has shown that “*at first sight; on the first appearance; on the face of it; so far as can be judged from the first disclosure*” the Examiner-cited art is very different from Claim 1, and Applicant has noted that Examiner has not cited to any objectively verifiable evidence/argument based on same sufficient to remedy such *prima facie* differences, the Examiner-cited technical material does not establish a *prima facie* case of the unpatentability of Claim 1 either under the MPEP or under controlling legal standards. See *supra* at pp. **Error! Bookmark not defined.–Error! Bookmark not defined..**

Accordingly, insofar as that the Cited References (Jaeger, IEEE, and Yao), either singly or in combination, do not recite the text of at least Clause [b] of Applicant’s Independent Claim 1, and insofar as that Examiner has provided no objectively verifiable evidence, or argument based on objectively verifiable evidence, as to how the Cited References (Jaeger, IEEE, and Yao) could be modified/combined to teach at least Clause [b] of Independent Claim 1, Applicant respectfully points out that under the MPEP guidelines as set forth above, the Examiner-cited technical material does not establish a *prima facie* case of the unpatentability of Independent Claim 1 for at least these reasons. Thus, Applicant respectfully asks Examiner to hold Independent Claim 1 allowable and to issue a Notice of Allowability of same.

With respect to Examiner assertions regarding the teachings of the Cited References (Jaeger, IEEE, and Yao), Applicant respectfully points out that even if Examiner’s assertions regarding the teachings of the Cited References were supported,



such would be of no moment in that Examiner has yet to connect the alleged teaching of the Cited References (Jaeger, IEEE, and Yao) to the actual express language of Applicant's Independent Claim 1. Under the MPEP guidelines as set forth above, the cited art of record fails to establish a *prima facie* case of unpatentability for at least these reasons. Accordingly, for at least the foregoing reasons, Applicant respectfully requests that Examiner hold Independent Claim 1 allowable and issue a Notice of Allowability of same.

**(2) Examiner Interpretation Appears to be Based on Inadvertent Impermissible Hindsight, Personal Knowledge, or Official Notice; Applicant Requests Issuance of Notice of Allowability**

Given that Applicant has shown, above, what the Cited References (Jaeger, IEEE, and Yao) actually recite, the question thus naturally arises as to how Examiner saw the Cited References (Jaeger, IEEE, and Yao) as “teaching” something related to Clause [b] of Independent Claim 1. Applicant respectfully points out that the Applicant's Application is the only objectively verifiable Examiner-cited document of record that shows or suggests what Examiner purports the references to teach. From this and the express recitations of the Cited References (Jaeger, IEEE, and Yao) as set forth, it follows that Examiner is interpreting the Cited References (Jaeger, IEEE, and Yao) through the lens of Applicant's application, which is impermissible hindsight use. Thus, at present, Examiner's assertions regarding the Cited References (Jaeger, IEEE, and Yao) are untenable. Under the MPEP guidelines as set forth above, the cited art of record fails to establish a *prima facie* case<sup>11</sup> of unpatentability for at least these reasons. Accordingly, for at least the foregoing reasons, Applicant respectfully requests that Examiner hold Independent Claim 1 allowable and issue a Notice of Allowability of same.

In the alternative and/or in addition to the foregoing, as Examiner has provided no objectively verifiable evidence, nor argument based on objectively verifiable evidence, in support of Examiner assertions regarding what the technical material cited by Examiner

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<sup>11</sup> Specifically, *prima facie* is defined as “at first sight; on the first appearance; on the face of it; so far as can be judged from the first disclosure.” *Black's Law Dictionary* p. 1189 (6<sup>th</sup> ed. 1990).

“teaches,” Applicant infers that the Examiner is relying on “personal knowledge” and/or is taking “official notice” of one or more factors to reach the factual conclusion of what the cited technical material “teaches.” In view of the foregoing, if Examiner desires to maintain the rejection, in the next communication, Applicant respectfully requests that the Examiner provide an affidavit or declaration setting forth objectively verifiable evidence in support of Examiner’s currently unsupported assertions regarding what the cited technical material “teaches” and/or should be interpreted to “teach.” *See, e.g.,* MPEP S 2144.03(C), *If Applicant Challenges a Factual Assertion as Not Properly Officially Noticed or Not Properly Based Upon Common Knowledge, the Examiner Must Support the Finding with Adequate Evidence*, and 37 C.F.R. 1.104(d)(2).

**2. Dependent Claims 2--25: Patentable for at Least Reasons of Dependency from Independent Claim 1.**

Claims 2-25 depend either directly or indirectly from Independent Claim 1. "A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." *See* 35 U.S.C. § 112 paragraph 4. Consequently, Dependent Claims 2-25 are patentable for at least the reasons why Independent Claim 1 is patentable. Accordingly, Applicant respectfully requests that Examiner hold Dependent Claims 2-25 patentable for at least the foregoing reasons, and issue a Notice of Allowance on same.

**3. Dependent Claim 7 is Independently Patentable**

Irrespective of the arguments discussed above, Claim 7 is independently patentable due to additional recitations recited therein. With reference to Claim 7, Examiner has stated as follows:

48. As per claim 7, the combination of Jaeger/IEEE/Yao discloses all the limitations of claim 7 except said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system;

Ma discloses the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system (col. 9, lines 10-22; col. 10, lines 43-60; Figs. 4 and 5). *It should be noted that "disk-based storage system 14" is equivalent to the "hardware spatial data storage system." It should also be noted that the schedules in Fig. 5 are defined in response to the location of data in the disk-based storage system. The location of data in the disk-based storage system dictates the order of data in the disk-based storage system.*

*Therefore, it follows that the schedules in Fig. 5 are also defined in response to the order of the data in the disk-based storage system.*

The combination of Jaeger/IEEE/Yao and Ma are analogous art because they are from the same field of endeavor, that being data transmission.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply Ma's scheduling technique to Jaeger/IEEE/Yao's schedule. The motivation for doing so would have been to provide sequential-like parallel retrieval suitable for supporting real-time multimedia data distribution for large numbers of clients.

*See Examiner's Final Office Action*, p. 17 (March 30<sup>th</sup>, 2010).

Applicant respectfully points out that Applicant has reviewed the Examiner Cited References (Jaeger, IEEE, Yao, and Ma), and so far as Applicant can discern, the identified references do not recite "the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system" as recited by claim 32.

The Examiner-cited portion of Ma states as follows:

The present invention provides a data placement technique and corresponding retrieval scheduling technique. These techniques permit a sequential-like retrieval which minimizes disk seeking time in a server supporting multiple simultaneous subscribers. This sequential-like retrieval avoids the previously noted problems associated with interleaving data retrievals which tend to result in a random-like retrieval performance and thereby limit the total number of simultaneous subscribers. The present invention provides sequential-like retrieval for a large number of subscribers by separating or "stripping" the data streams into portions, and storing or "scattering" the portions on the disks of storage subsystem 14 in accordance with a predetermined sequence.

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A media server in accordance with a preferred embodiment of the present invention also utilizes a retrieval scheduling technique illustrated in conjunction with FIGS. 4 and 5. The retrieval scheduling specifies a sequence of scheduling intervals, also referred to herein as rounds, during which data streams for all requesting clients are read from the disks of the storage subsystem 14. The data requested for a given stream in each scheduling interval is stored on the disks in one  $v\_seg$ . Data streams with different bit rates will generally have different sized  $v\_segs$ , but these different sized  $v\_segs$  will typically correspond to the delivery time interval. The retrieval scheduling technique serves to parallelize the retrieval operation. In accordance with a preferred embodiment of the retrieval scheduling technique, each of the Y disks in the subsystem 14 utilizes a particular independent scheduler, referred to as an  $r\_scheduler$ , during a given scheduling interval. A total of Y different  $r\_schedulers$  are used for a storage subsystem with Y disks.

FIG. 4

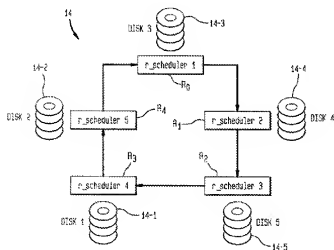


FIG. 5

f_scheduler	GPA	<DISK_ZONE> ACCESS BY TIME PERIOD										
		T <sub>0</sub>	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5</sub>	T <sub>6</sub>	T <sub>7</sub>	T <sub>8</sub>	T <sub>9</sub>	...
E <sub>0</sub>	0	<0, 0>	<1, 1>	<2, 2>	<0, 3>	<1, 0>	<2, 1>	<0, 2>	<1, 3>	<2, 0>	<0, 1>	...
	1	<0, 1>	<1, 2>	<2, 3>	<0, 0>	<1, 1>	<2, 1>	<0, 2>	<1, 0>	<2, 1>	<0, 2>	...
	2	<0, 2>	<1, 3>	<2, 0>	<0, 1>	<1, 2>	<2, 3>	<0, 0>	<1, 1>	<2, 2>	<0, 3>	...
	3	<0, 3>	<1, 0>	<2, 1>	<0, 2>	<1, 3>	<2, 0>	<0, 1>	<1, 2>	<2, 3>	<0, 0>	...
E <sub>1</sub>	4	<1, 1>	<2, 2>	<0, 3>	<1, 0>	<2, 1>	<0, 2>	<1, 3>	<2, 0>	<0, 1>	<1, 2>	...
	5	<1, 2>	<2, 3>	<0, 0>	<1, 1>	<2, 2>	<0, 3>	<1, 0>	<2, 1>	<0, 2>	<1, 3>	...
	6	<1, 3>	<2, 0>	<0, 1>	<1, 2>	<2, 3>	<0, 0>	<1, 1>	<2, 2>	<0, 3>	<1, 0>	...
	7	<1, 0>	<2, 1>	<0, 2>	<1, 3>	<2, 0>	<0, 1>	<1, 2>	<2, 3>	<0, 0>	<1, 1>	...
E <sub>2</sub>	8	<2, 2>	<0, 3>	<1, 0>	<2, 1>	<0, 2>	<1, 3>	<2, 0>	<0, 1>	<1, 2>	<2, 3>	...
	9	<2, 3>	<0, 0>	<1, 1>	<2, 2>	<0, 3>	<1, 0>	<2, 1>	<0, 2>	<1, 3>	<2, 0>	...
	10	<2, 0>	<0, 1>	<1, 2>	<2, 3>	<0, 0>	<1, 1>	<2, 2>	<0, 3>	<1, 0>	<2, 1>	...
	11	<2, 1>	<0, 2>	<1, 3>	<2, 0>	<0, 3>	<1, 2>	<2, 3>	<0, 0>	<1, 1>	<2, 2>	...

See Ma (9:10-22, 10:43-60, Figs. 4-5).

As can be seen from the foregoing, the Examiner-identified portions of Ma do not *recite or suggest* the text of Claim 7: “the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system.” (Emphasis added.) Instead, Ma recites “[t]he present invention provides sequential-like retrieval for a large number of subscribers by separating or “stripping” the data streams into portions, and storing or “scattering” the portions on the disks of storage subsystem 14 in accordance with a predetermined sequence,” (Ma, 9:18-22) and “[t]he retrieval scheduling specifies a sequence of scheduling intervals, also referred to herein as rounds, during which data streams for all requesting clients are read from the disks of the storage subsystem 14” (Ma, 10:46-49). Consequently, on its face, Ma does not show or suggest the text of Claim 7.

Applicant has shown that on its face the evidence cited by Examiner does not establish a *prima facie* case of unpatentability with respect to Claim 7 or even to its parent claim. Applicant has shown by direct quotations that Applicant’s Claim 7 and the Examiner-cited references are very different on their faces. Insofar that Applicant has shown that “*at first sight; on the first appearance; on the face of it; so far as can be judged from the first disclosure*” the Examiner-cited art is very different from Dependent Claim 7 and its parent claim, and Applicant has noted that Examiner has not cited to any objectively verifiable evidence/argument based on same sufficient to remedy such *prima facie* differences, the Examiner-cited technical material does not establish a *prima facie*

case of the unpatentability of Dependent Claim 7 and its parent claim either under the MPEP or under controlling legal standards.

**C. Technical Material Cited by Examiner Does Not Show or Suggest the Text of Independent Claim 26 and Dependent Claims 27-50 as Presented Herein; Notice of Allowance of Same Respectfully Requested**

**1. Independent Claim 26**

Independent Claim 26 recites:

1. A method comprising:

[a] means for receiving a request for at least one specific content;

[b] means for obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content; and

[c] means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses.

(Emphasis added.)

As shown following, (1) Examiner is interpreting Jaeger to “teach” at least a portion of the text of Independent Claim 26 but has not provided any objectively verifiable evidence supporting his interpretation, and (2) modifications/ combinations of technologies cited by Examiner to meet the recitations of Independent Claim 26 are mere conclusory statements, would change the principle of operation, and/or render the prior art components unfit for their intended purpose.

Under the MPEP standards as set forth herein, Examiner has not met his burden to establish a prima facie case of the unpatentability of Independent Claim 26 for any or all of the forgoing reasons. Accordingly, Applicant respectfully requests that Examiner withdraw his rejections of Claim 26 and Issue a Notice of Allowability for same.

Concerning this, Examiner has stated,

27. As per claim 26, Jaeger discloses a system comprising:

means for obtaining one or more temporal addresses corresponding to the at least one specific content (col. 6, lines 52-63; Fig. 1). *See the citation note for the similar limitation in claim 1 above.*

and means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses (col. 6, lines 49-63; Fig. 2). *See the citation note for the similar limitation in claim 1 above.*

Jaeger does not explicitly disclose means for receiving a request for at least one specific content.

IEEE discloses disk read I/O transactions are composed of transaction initiations (i.e. requests) (pg. 590, "I/O transaction" and pg. 1198, "transaction initiation (request)").

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the record/playback apparatus receive a playback request so that the incremental temporal segments of each recorded track are read from the disk in response to the playback request. The motivation for doing so would have been to prevent playback at times when the disk drive and/or RAM buffer are not ready to handle the reading and/or writing of data frames.

The combination of Jaeger/IEEE does not disclose associating the specific content with one or more times of one or more transmitted data portions.

Yao discloses associating the specific content with one or more times of one or more transmitted data portions (col. 7, lines 33-66; Fig. 5, element S25). *It should be noted that the "transfer start timings" are equivalent to the "one or more times".*

The combination of Jaeger/IEEE and Yao are analogous art because they are from the same field of endeavor, that being data streaming systems.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Yao's schedule within Jaeger/IEEE's recording/playback system. The motivation for doing so would have been to provide a real time stream server and a method for operating a real time stream server, capable of realizing a supply of a plurality of real time stream data with different data rates by a scheduling scheme using constant time-slot interval and transfer start timing period, without wasting a transfer capacity of disk devices (Yao, col. 2, lines 40-46).

*See Examiner's Final Office Action*, p. 10-11 (March 30<sup>th</sup>, 2010).

**(I) Examiner Has Put Forth No Evidence Supporting His Characterization That the Cited References “Teach” Recitations of Clause [b] of Independent Claim 26.**

Applicant respectfully points out that Applicant has reviewed the portions of the Cited References (Jaeger, IEEE, Yao) identified by the Examiner, and so far as Applicant can discern, the Cited References do not recite “means for obtaining one or more temporal addresses corresponding to the at least one specific content *by associating the specific content with one or more times of one or more transmitted data portions*, in response to the request for the at least one specific content” as recited in clause [b] of Independent Claim 26. Rather, the portions of Jaeger cited by Examiner with respect to Claim 26 recite as follows:

onto a disk drive. First, incremental temporal segments of each recorded audio track are read from the disk 11 in a predetermined numerical order, e.g., starting with track 1 and ending with the last recorded track (e.g., track N). The temporal segments are all of the same short duration, such as 100 ms, although other durations may be used. In the example of FIG. 1, the first 100 ms segments of tracks 1-N are read in a predetermined order from the disk 11 and placed in a RAM buffer in the predetermined order, where they are assembled into composite data frame 1. Frame 1 is labeled with a time stamp which indicates the starting point of the frame and also the number of the frame. Likewise, the second 100 ms segments of tracks 1-N are then read from the disk drive 11 and placed in the RAM buffer as data frame 2, which is also labeled with its respective time stamp. This

\* \* \*



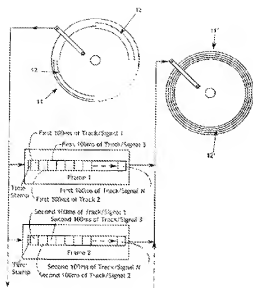


FIG. 1

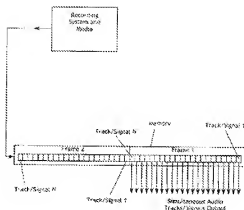


FIG. 2

See Jaeger (5:49-63; Figs. 1-2).

As can be seen from the foregoing, the Examiner-identified portions of Jaeger do not recite or suggest the text of at least clause [b] as recited in Independent Claim 26: “means for obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content.” (Emphasis added.) Instead, Jaeger recites “First, incremental temporal segments of each recorded audio track are read from the disk 11 in a predetermined numerical order, e.g., starting with track 1 and ending with the last recorded track (e.g., track N). The temporal segments are all of the same short duration, such as 100 ms, although other durations may be used.” (Jaeger 5:49-54.) Consequently, on its face, Jaeger does not show the text of at least Clause [b] of Independent Claim 26.

Similarly, the Examiner-cited portions of IEEE state:

**I/O transaction** An instance of activity between Functions, usually composed of an Initiation and a Completion, although not necessarily bound one to one. A disk read and network data delivery are examples of I/O transactions.

(C/M/M) 1212.1-1993

**transaction initiation (request)** A request generated by the initiator to start an action by the responder. An initiation message usually transfers a command and sometimes data. For a disk read I/O transaction, for example, the initiation transfers the address and command.

(C/M/M) 1212.1-1993

See IEEE (p. 590, 1198).

As can be seen from the foregoing, the Examiner-identified portions of IEEE do not recite or suggest the text of at least clause [b] as recited in Independent Claim 26: “means for obtaining one or more temporal addresses corresponding to the at least one specific content by *associating the specific content with one or more times of one or more transmitted data portions*, in response to the request for the at least one specific content.” (Emphasis added.) Instead, IEEE recites “An initiation message usually transfers a command and sometimes data.” (IEEE, p. 1198.) Consequently, on its face, IEEE does not show or suggest the text of at least Clause [b] of Independent Claim 26.

Finally, the Examiner-cited portions of Yao state:

Next, the scheduling unit 22 carries out the scheduling including a selection of transfer start timings for the unit streams S0 to Sm-1 to be used (step S25). Here, by the real time stream data storing procedure described above, m pieces of blocks b(m·k+j) (j=0, . . . , m-1) which are continuous in the original real time stream data are sequentially distributed among the unit streams S0 to Sm-1. Consequently, in order to carry out the transfer of these blocks continuously, the transfer start timings of the unit streams S0 to Sm-1 are displaced one another by the block transfer time T<sub>m</sub> part.

Here however it is necessary for each one of the unit streams S0 to Sm-1 to select a time-slot for carrying out the disk access, so that it becomes possible to read out the respective top block from the disk device 31 which stores that top block, before the selected transfer start timing, without affecting the continuity of the other already connected unit streams. Note that the ID number of the disk

device 31 which stores the top block of each unit stream can be obtained from the directory information obtained at the step S22. This time-slot selection operation will be described in detail below. When this condition is not satisfied, it is necessary to select different transfer start timings anew.

Each one of the unit streams S0 to Sm-1 so connected is then scheduled as an independent unit stream for which the block transfer time for one block is T<sub>m</sub>, that is, scheduled according to the block transfer period T, the block size L, the time-slot interval I, and the block transfer time T<sub>m</sub>. Then, according to this scheduling, each block is read out from the buffer memory 4 from the recording position of each block on a disk device which is indicated by the directory information, and supplied to the client 7 from the data transfer unit 5 (step S26).

\* \* \*

FIG.5

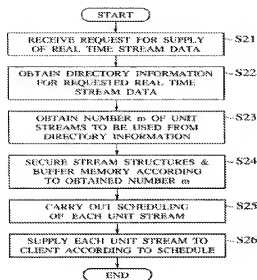


FIG.6



See Yao (7:33-65, Figs. 5-6).

As can be seen from the foregoing, the Examiner-identified portions of Yao do not recite or suggest the text of at least clause [b] as recited in Independent Claim 26: “means for obtaining one or more temporal addresses corresponding to the at least one specific content by *associating the specific content with one or more times of one or more transmitted data portions*, in response to the request for the at least one specific content.” (Emphasis added.) Instead, Yao recites “Supply each unit stream to client according to schedule.” (Yao, element S26.) Consequently, on its face, Yao does not show or suggest the text of at least Clause [b] of Independent Claim 26.

For the foregoing reasons, the Cited References (Jaeger, IEEE, and Yao), either singly or in combination, do not disclose or suggest the recitations of clause [b] of Claim 26: “means for obtaining one or more temporal addresses corresponding to the at least one specific content by *associating the specific content with one or more times of one or more transmitted data portions*, in response to the request for the at

least one specific content.” (Emphasis added.) Therefore, Claim 26 is in condition for allowance.

Applicant respectfully notes: “[W]hat a reference teaches is a question of fact.” *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1358 (Fed. Cir. 2001) (referencing *In re Beattie*, 974 F.2d 1309, 1311 (Fed.Cir.1992)). See also *McGinley v. Franklin Sports*, 262 F.3d 1339, 1350 (Fed. Cir. 2001).

Applicant has shown by direct quotations that Independent Claim 26 and the Cited References (Jaeger, IEEE, and Yao) are very different on their faces. See *supra* at pp. 41 (quotation of Claim 1); at pp. 44-**Error! Bookmark not defined.** (quotation of Jaeger). Insofar that Applicant has shown that “*at first sight; on the first appearance; on the face of it; so far as can be judged from the first disclosure*” the Examiner-cited art is very different from Claim 26, and Applicant has noted that Examiner has not cited to any objectively verifiable evidence/argument based on same sufficient to remedy such *prima facie* differences, the Examiner-cited technical material does not establish a *prima facie* case of the unpatentability of Claim 26 either under the MPEP or under controlling legal standards. See *supra* at pp. **Error! Bookmark not defined.**-**Error! Bookmark not defined.**

Accordingly, insofar as that the Cited References (Jaeger, IEEE, and Yao), either singly or in combination, do not recite the text of at least Clause [b] of Applicant’s Independent Claim 26, and insofar as that Examiner has provided no objectively verifiable evidence, or argument based on objectively verifiable evidence, as to how the Cited References (Jaeger, IEEE, and Yao) could be modified/combined to teach at least Clause [b] of Independent Claim 26, Applicant respectfully points out that under the MPEP guidelines as set forth above, the Examiner-cited technical material does not establish a *prima facie* case of the unpatentability of Independent Claim 26 for at least these reasons. Thus, Applicant respectfully asks Examiner to hold Independent Claim 26 allowable and to issue a Notice of Allowability of same.

With respect to Examiner assertions regarding the teachings of the Cited References (Jaeger, IEEE, and Yao), Applicant respectfully points out that even if Examiner’s assertions regarding the teachings of the Cited References were supported,

such would be of no moment in that Examiner has yet to connect the alleged teaching of the Cited References (Jaeger, IEEE, and Yao) to the actual express language of Applicant's Independent Claim 26. Under the MPEP guidelines as set forth above, the cited art of record fails to establish a *prima facie* case of unpatentability for at least these reasons. Accordingly, for at least the foregoing reasons, Applicant respectfully requests that Examiner hold Independent Claim 26 allowable and issue a Notice of Allowability of same.

**(2) Examiner Interpretation Appears to be Based on Inadvertent Impermissible Hindsight, Personal Knowledge, or Official Notice; Applicant Requests Issuance of Notice of Allowability**

Given that Applicant has shown, above, what the Cited References (Jaeger, IEEE, and Yao) actually recite, the question thus naturally arises as to how Examiner saw the Cited References (Jaeger, IEEE, and Yao) as “teaching” something related to Clause [b] of Independent Claim 26. Applicant respectfully points out that the Applicant's Application is the only objectively verifiable Examiner-cited document of record that shows or suggests what Examiner purports the references to teach. From this and the express recitations of the Cited References (Jaeger, IEEE, and Yao) as set forth, it follows that Examiner is interpreting the Cited References (Jaeger, IEEE, and Yao) through the lens of Applicant's application, which is impermissible hindsight use. Thus, at present, Examiner's assertions regarding the Cited References (Jaeger, IEEE, and Yao) are untenable. Under the MPEP guidelines as set forth above, the cited art of record fails to establish a *prima facie* case<sup>12</sup> of unpatentability for at least these reasons. Accordingly, for at least the foregoing reasons, Applicant respectfully requests that Examiner hold Independent Claim 26 allowable and issue a Notice of Allowability of same.

In the alternative and/or in addition to the foregoing, as Examiner has provided no objectively verifiable evidence, nor argument based on objectively verifiable evidence, in support of Examiner assertions regarding what the technical material cited by Examiner

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<sup>12</sup> Specifically, *prima facie* is defined as “at first sight; on the first appearance; on the face of it; so far as can be judged from the first disclosure.” *Black's Law Dictionary* p. 1189 (6<sup>th</sup> ed. 1990).

“teaches,” Applicant infers that the Examiner is relying on “personal knowledge” and/or is taking “official notice” of one or more factors to reach the factual conclusion of what the cited technical material “teaches.” In view of the foregoing, if Examiner desires to maintain the rejection, in the next communication, Applicant respectfully requests that the Examiner provide an affidavit or declaration setting forth objectively verifiable evidence in support of Examiner’s currently unsupported assertions regarding what the cited technical material “teaches” and/or should be interpreted to “teach.” *See, e.g., MPEP S 2144.03(C), If Applicant Challenges a Factual Assertion as Not Properly Officially Noticed or Not Properly Based Upon Common Knowledge, the Examiner Must Support the Finding with Adequate Evidence*, and 37 C.F.R. 1.104(d)(2).

**2. Dependent Claims 27--50: Patentable for at Least Reasons of Dependency from Independent Claim 26.**

Claims 27-50 depend either directly or indirectly from Independent Claim 26. "A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." *See* 35 U.S.C. § 112 paragraph 4. Consequently, Dependent Claims 27-50 are patentable for at least the reasons why Independent Claim 26 is patentable. Accordingly, Applicant respectfully requests that Examiner hold Dependent Claims 27-50 patentable for at least the foregoing reasons, and issue a Notice of Allowance on same.

**3. Dependent Claim 32 is Independently Patentable**

Irrespective of the arguments discussed above, Claim 32 is independently patentable due to additional recitations recited therein. With reference to Claim 32, Examiner has stated as follows:

53 As per claim 32, the combination of Jaeger/IEEE/Yao discloses all the limitations of claim 32 except said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system

Ma discloses the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system (col. 9, lines 10-22; col. 10, lines 43-60; Figs. 4 and 5). *See the citation for claim 7 above.*

*See Examiner's Final Office Action*, p. 18 (March 30<sup>th</sup>, 2010).

Applicant respectfully points out that Applicant has reviewed the Examiner Cited References (Jaeger, IEEE, Yao, and Ma), and so far as Applicant can discern, the identified references do not recite “the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system” as recited by claim 32.

The Examiner-cited portion of Ma states as follows:

The present invention provides a data placement technique and corresponding retrieval scheduling technique. These techniques permit a sequential-like retrieval which minimizes disk seeking time in a server supporting multiple simultaneous subscribers. This sequential-like retrieval avoids the previously-noted problems associated with interleaving data retrievals which tend to result in a random-like retrieval performance and thereby limit the total number of simultaneous subscribers. The present invention provides sequential-like retrieval for a large number of subscribers by separating or “stripping” the data streams into portions, and storing or “scattering” the portions on the disks of storage subsystem 14 in accordance with a predetermined sequence.

\* \* \*

A media server in accordance with a preferred embodiment of the present invention also utilizes a retrieval scheduling technique illustrated in conjunction with FIGS. 4 and 5. The retrieval scheduling specifies a sequence of scheduling intervals, also referred to herein as rounds, during which data streams for all requesting clients are read from the disks of the storage subsystem 14. The data requested for a given stream in each scheduling interval is stored on the disks in one  $v\_seg$ . Data streams with different bit rates will generally have different sized  $v\_seg$ s, but these different sized  $v\_seg$ s will typically correspond to the delivery time interval. The retrieval scheduling technique serves to parallelize the retrieval operation. In accordance with a preferred embodiment of the retrieval scheduling technique, each of the  $Y$  disks in the subsystem 14 utilizes a particular independent scheduler, referred to as an  $r\_scheduler$ , during a given scheduling interval. A total of  $Y$  different  $r\_schedulers$  are used for a storage subsystem with  $Y$  disks.

FIG. 4

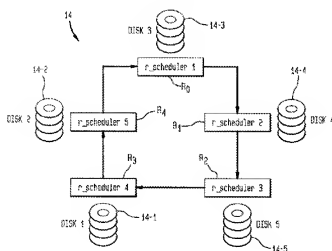


FIG. 5

$r\_scheduler$	GROUP	<DISK_ZONE> ACCESS BY TIME PERIOD										
		$T_0$	$T_1$	$T_2$	$T_3$	$T_4$	$T_5$	$T_6$	$T_7$	$T_8$	$T_9$	...
$R_0$	0	<0, 0>	<1, 1>	<2, 2>	<3, 3>	<4, 4>	<5, 5>	<6, 6>	<7, 7>	<8, 8>	<9, 9>	...
	1	<0, 1>	<1, 2>	<2, 3>	<3, 4>	<4, 5>	<5, 6>	<6, 7>	<7, 8>	<8, 9>	<9, 0>	...
	2	<0, 2>	<1, 3>	<2, 4>	<3, 5>	<4, 6>	<5, 7>	<6, 8>	<7, 9>	<8, 0>	<9, 1>	...
	3	<0, 3>	<1, 4>	<2, 5>	<3, 6>	<4, 7>	<5, 8>	<6, 9>	<7, 0>	<8, 1>	<9, 2>	...
$R_1$	4	<0, 4>	<1, 5>	<2, 6>	<3, 7>	<4, 8>	<5, 9>	<6, 0>	<7, 1>	<8, 2>	<9, 3>	...
	5	<0, 5>	<1, 6>	<2, 7>	<3, 8>	<4, 9>	<5, 0>	<6, 1>	<7, 2>	<8, 3>	<9, 4>	...
	6	<0, 6>	<1, 7>	<2, 8>	<3, 9>	<4, 0>	<5, 1>	<6, 2>	<7, 3>	<8, 4>	<9, 5>	...
	7	<0, 7>	<1, 8>	<2, 9>	<3, 0>	<4, 1>	<5, 2>	<6, 3>	<7, 4>	<8, 5>	<9, 6>	...
$R_2$	8	<0, 8>	<1, 9>	<2, 0>	<3, 1>	<4, 2>	<5, 3>	<6, 4>	<7, 5>	<8, 6>	<9, 7>	...
	9	<0, 9>	<1, 0>	<2, 1>	<3, 2>	<4, 3>	<5, 4>	<6, 5>	<7, 6>	<8, 7>	<9, 8>	...
	10	<0, 0>	<1, 1>	<2, 2>	<3, 3>	<4, 4>	<5, 5>	<6, 6>	<7, 7>	<8, 8>	<9, 9>	...
	11	<0, 1>	<1, 2>	<2, 3>	<3, 4>	<4, 5>	<5, 6>	<6, 7>	<7, 8>	<8, 9>	<9, 0>	...

See Ma (9:10-22, 10:43-60, Figs. 4-5).



As can be seen from the foregoing, the Examiner-identified portions of Ma do not recite or suggest the text of Claim 32: “means for the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system.” (Emphasis added.) Instead, Ma recites “[t]he present invention provides sequential-like retrieval for a large number of subscribers by separating or “stripping” the data streams into portions, and storing or “scattering” the portions on the disks of storage subsystem 14 in accordance with a predetermined sequence,” (Ma, 9:18-22) and “[t]he retrieval scheduling specifies a sequence of scheduling intervals, also referred to herein as rounds, during which data streams for all requesting clients are read from the disks of the storage subsystem 14” (Ma, 10:46-49). Consequently, on its face, Ma does not show or suggest the text of Claim 32.

Applicant has shown that on its face the evidence cited by Examiner does not establish a prima facie case of unpatentability with respect to Claim 32 or even to its parent claim. Applicant has shown by direct quotations that Applicant’s Claim 32 and the Examiner-cited references are very different on their faces. Insofar that Applicant has shown that “*at first sight; on the first appearance; on the face of it; so far as can be judged from the first disclosure*” the Examiner-cited art is very different from Dependent Claim 32 and its parent claim, and Applicant has noted that Examiner has not cited to any objectively verifiable evidence/argument based on same sufficient to remedy such *prima facie* differences, the Examiner-cited technical material does not establish a *prima facie* case of the unpatentability of Dependent Claim 32 and its parent claim either under the MPEP or under controlling legal standards.

## **VIII. EVIDENCE APPENDIX**

Appellant hereby indicates as follows: “none” or “not applicable.”

## **IX. RELATED PROCEEDINGS APPENDIX**

Appellant hereby indicates as follows: “none” or “not applicable.”

## **X. CONCLUSION**

Appellant may have during the course of prosecution cancelled and/or amended one or more claims. Appellant notes that any such cancellations and/or amendments will have transpired (i) prior to issuance and (ii) in the context of the rules that govern claim interpretation during prosecution before the United States Patent and Trademark Office (USPTO). Appellant notes that the rules that govern claim interpretation during prosecution form a radically different context than the rules that govern claim interpretation subsequent to a patent issuing. Accordingly, Appellant respectfully submits that any cancellations and/or amendments during the course of prosecution should be held to be tangential to and/or unrelated to patentability in the event that such cancellations and/or amendments are viewed in a post-issuance context under post-issuance claim interpretation rules.

Insofar as that the Appellant may have during the course of prosecution cancelled/amended/argued claims sufficient to obtain a Notice of Allowability of all claims pending, Appellant may not have during the course of prosecution explicitly addressed all rejections and/or statements in Examiner's Office Actions. The fact that rejections and/or statements may not be explicitly addressed during the course of prosecution should NOT be taken as an admission of any sort, and Appellant hereby reserves any and all rights to contest such rejections and/or statements at a later time. Specifically, no waiver (legal, factual, or otherwise), implicit or explicit, is hereby intended (e.g., with respect to any facts of which Examiner took Official Notice, and/or for which Examiner has supplied no objective showing, Appellant hereby contests those facts and requests express documentary proof of such facts at such time at which such facts may become relevant). For example, although not expressly set forth during the course of prosecution, Appellant continues to assert all points of (e.g. caused by, resulting from, responsive to, etc.) any previous Office Action, and no waiver (legal, factual, or otherwise), implicit or explicit, is hereby intended. Specifically, insofar as that Appellant does not consider the cancelled/unamended claims to be unpatentable, Appellant hereby gives notice that it may intend to file and/or has filed a continuing application in order prosecute such cancelled/unamended claims.

With respect to any cancelled claims, such cancelled claims were and continue to be a part of the original and/or present patent application(s). Appellant hereby reserves all rights to present any cancelled claim or claims for examination at a later time in this or another application. Appellant hereby gives public notice that any cancelled claims are still to be considered as present in all related patent application(s) (e.g. the original and/or present patent application) for all appropriate purposes (e.g., written description and/or enablement). Appellant does NOT intend to dedicate the subject matter of any cancelled claims to the public.

Appellant reserves the right to submit argument, rebuttal evidence, or legal authority in the instance the Board of Patent Appeals and Interferences finds that the Examiner has met his burden in establishing a *prima facie* case of unpatentability of the various appealed claims. Appellant further reserves the right to submit argument, rebuttal evidence, or legal authority if new claim interpretations or definitional citations are raised on appeal. The fact that argument, rebuttal evidence, or legal authority may not have been explicitly discussed during the course of prosecution should NOT be taken as an admission or waiver of any sort, and Appellant hereby reserves any and all rights to discuss (e.g. make explicit, produce, or explain) such rebuttal evidence at a later time.

The Examiner is invited to contact the undersigned at (360) 627-7147 to discuss any matters that may expedite prosecution of the application.

Respectfully submitted,

\_\_October 26<sup>th</sup>, 2010\_\_

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## APPENDIX A. APPENDIX OF CLAIMS INVOLVED IN THE APPEAL

1. (Previously Presented) A method comprising:  
receiving a request for at least one specific content;  
obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content; and  
selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses, the spatial-to-temporal translated data being from a hardware spatial data storage system.
2. (Previously Presented) The method of Claim 1, wherein said receiving a request for at least one specific content further comprises:  
receiving a request for at least a portion of recorded video.
3. (Previously Presented) The method of Claim 1, wherein said receiving a request for at least one specific content further comprises:  
receiving a request for at least a portion of recorded audio.
4. (Previously Presented) The method of Claim 1, wherein said receiving a request for at least one specific content further comprises:  
receiving a request for at least a portion of recorded video and recorded audio.
5. (Previously Presented) The method of Claim 1, wherein said receiving a request for at least one specific content further comprises:  
receiving a request for at least a portion of at least one of computer processable and/or network processable data.
6. (Previously Presented) The method of Claim 1, wherein said obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content further comprises:

consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions.

7. (Previously Presented) The method of Claim 6, wherein said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system.

8. (Original) The method of Claim 7, wherein said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

consulting a schedule published by at least one of a source controller and a source switch controller.

9. (Original) The method of Claim 8, wherein said consulting a schedule published by at least one of a source controller and a source switch controller further comprises:

accepting input of the schedule published by at least one of the source controller and the source switch controller.

10. (Previously Presented) The method of Claim 7, wherein said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

consulting a schedule received from at least one of a source controller and/or a source switch controller.

11. (Previously Presented) The method of Claim 10, wherein said consulting a schedule received from at least one of a source controller and/or a source switch controller further comprises:

receiving the schedule from a data stream.

12. (Previously Presented) The method of Claim 6, wherein said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

associating the specific content with at least one absolute time associated with a clock.

13. (Previously Presented) The method of Claim 12, wherein said associating the specific content with at least one absolute time associated with a clock further comprises:

associating the specific content with at least one time associated with at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and/or a number of ticks relative to some specified received data.

14. (Original) The method of Claim 12, wherein said associating the specific content with at least one absolute time associated with a clock further comprises:

associating the specific content with at least one absolute time associated with a transmitted clock.

15. (Previously Presented) The method of Claim 6, wherein said consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

associating the specific content with at least one relative time.

16. (Original) The method of Claim 15, wherein said associating the specific content with at least one relative time further comprises:

associating the specific content with at least one time relative to a received marker.

17. (Previously Presented) The method of Claim 15, wherein said associating the specific content with at least one relative time further comprises:

associating the specific content with at least one time of a first and/or a second received marker.

18. (Original) The method of Claim 1, wherein said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting at least a portion of cyclically transmitted data in response to the one or more temporal addresses.

19. (Original) The method of Claim 1, wherein said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from a first network and a second network in response to the one or more temporal addresses.

20. (Original) The method of Claim 1, further comprising:

constructing the specific content from data selected from a first network and a second network in response to the one or more temporal addresses.

21. (Original) The method of Claim 1, wherein said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having file-address -to-temporal- address translated data.

22. (Original) The method of Claim 1, wherein said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having disk-address -to-temporal- address translated data.

23. (Original) The method of Claim 1, wherein said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having tape-address -to-temporal-address translated data.

24. (Original) The method of Claim 1, wherein said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having substantially static memory-address -to-temporal- address translated data.

25. (Original) The method of Claim 1, wherein said selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

selecting data from at least one data stream having object-address -to-temporal-address translated data.

26. (Previously Presented) A system comprising:

means for receiving a request for at least one specific content;

means for obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content; and

means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses.

27. (Previously Presented) The system of Claim 26, wherein said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of recorded video.

28. (Previously Presented) The system of Claim 26, wherein said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of recorded audio.



29. (Previously Presented) The system of Claim 26, wherein said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of recorded video and recorded audio.

30. (Previously Presented) The system of Claim 26, wherein said means for receiving a request for at least one specific content further comprises:

means for receiving a request for at least a portion of at least one of computer processable and/or network processable data.

31. (Previously Presented) The system of Claim 26, wherein said means for obtaining one or more temporal addresses corresponding to the at least one specific content by associating the specific content with one or more times of one or more transmitted data portions, in response to the request for the at least one specific content further comprises:

means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions.

32. (Previously Presented) The system of Claim 31, wherein said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for the schedule being defined in response to an order in which the at least one content is spatially resident upon at least one hardware spatial data storage system.

33. (Previously Presented) The system of Claim 32, wherein said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for consulting a schedule published by at least one of a source controller and/or a source switch controller.

34. (Previously Presented) The system of Claim 33, wherein said means for consulting a schedule published by at least one of a source controller and/or a source switch controller further comprises:

means for accepting input of the schedule published by at least one of the source controller and/or the source switch controller.

35. (Previously Presented) The system of Claim 32, wherein said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for consulting a schedule received from a source controller and/or a source switch controller.

36. (Previously Presented) The system of Claim 35, wherein said means for consulting a schedule received from a source controller and/or a source switch controller further comprises:

means for receiving the schedule from a data stream.

37. (Previously Presented) The system of Claim 31, wherein said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for associating the specific content with at least one absolute time associated with a clock.

38. (Previously Presented) The system of Claim 37, wherein said means for associating the specific content with at least one absolute time associated with a clock further comprises:

means for associating the specific content with at least one time associated with at least one of an atomic clock, a global clock, a relative clock, a transmitted clock, and/or a number of ticks relative to some specified received data.

39. (Original) The system of Claim 37, wherein said means for associating the specific content with at least one absolute time associated with a clock further comprises:

means for associating the specific content with at least one absolute time associated with a transmitted clock.

40. (Previously Presented) The system of Claim 31, wherein said means for consulting a schedule having the specific content in association with the one or more times of the one or more transmitted data portions further comprises:

means for associating the specific content with at least one relative time.

41. (Original) The system of Claim 40, wherein said means for associating the specific content with at least one relative time further comprises:

means for associating the specific content with at least one time relative to a received marker.

42. (Previously Presented) The system of Claim 40, wherein said means for associating the specific content with at least one relative time further comprises:

means for associating the specific content with at least one time of a first and/or a second received marker.

43. (Original) The system of Claim 26, wherein said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting at least a portion of cyclically transmitted data in response to the one or more temporal addresses.

44. (Previously Presented) The system of Claim 26, wherein said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from a first network and/or a second network in response to the one or more temporal addresses.

45. (Previously Presented) The system of Claim 26, further comprising:  
means for constructing the specific content from data selected from a first network and/or a second network in response to the one or more temporal addresses.

46. (Original) The system of Claim 26, wherein said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having file-address -to-temporal- address translated data.

47. (Original) The system of Claim 26, wherein said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having disk-address -to-temporal- address translated data.

48. (Original) The system of Claim 26, wherein said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having tape-address -to-temporal- address translated data.

49. (Original) The system of Claim 26, wherein said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having substantially static memory-address -to-temporal- address translated data.

50. (Original) The system of Claim 26, wherein said means for selecting data from at least one data stream having spatial-to-temporal translated data, in response to the one or more temporal addresses further comprises:

means for selecting data from at least one data stream having object-address -to-temporal- address translated data.

Claims 51-57. (Previously Cancelled)

**APPENDIX B. APPENDIX OF EVIDENCE (NOT APPLICABLE).**

**APPENDIX C. APPENDIX OF RELATED PROCEEDINGS (NOT APPLICABLE).**